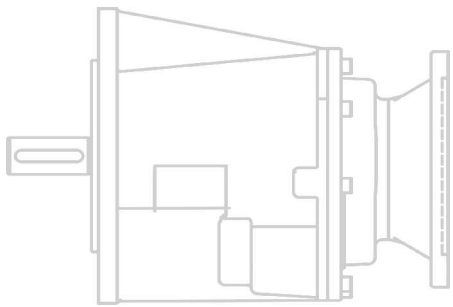
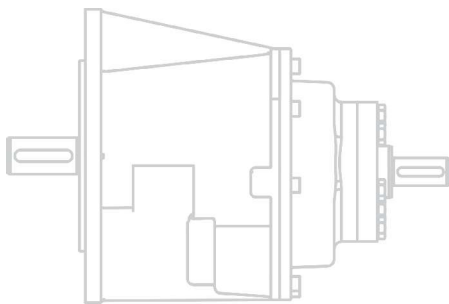
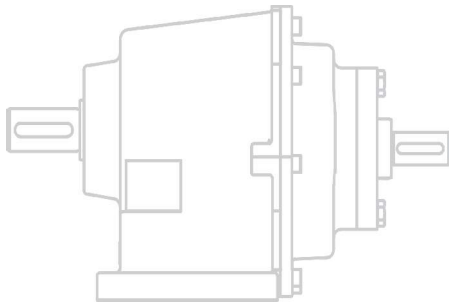




# TH SERIES



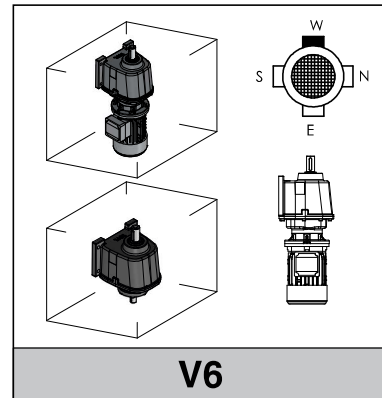
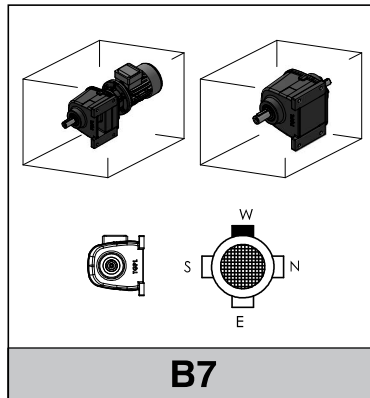
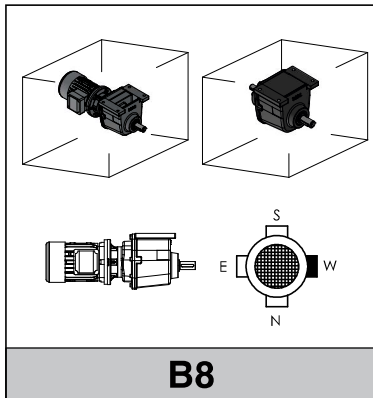
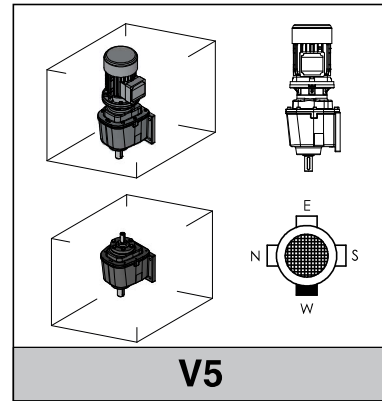
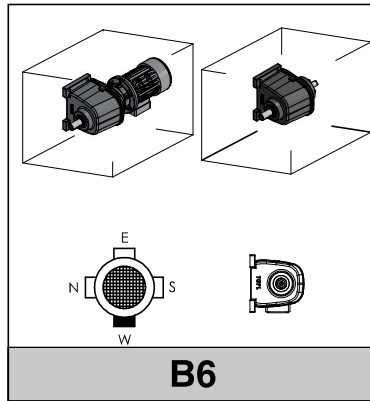
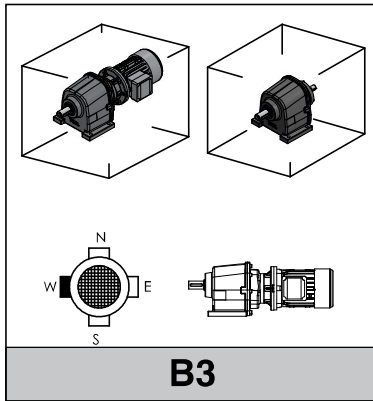
## 2. IN LINE HELICAL GEAR BOX



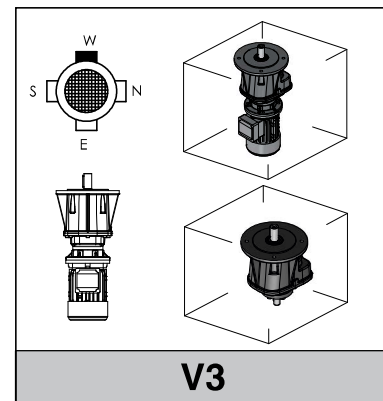
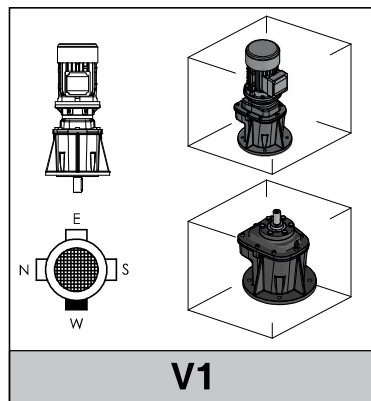
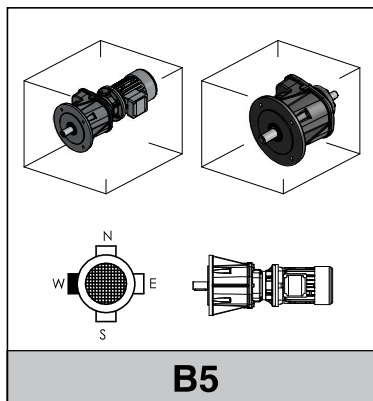
## 2.1 MOUNTING POSITIONS

### MOUNTING POSITION FOR GEAR BOX & GEARED MOTOR

#### F - FOOT MOUNTING




#### FL - FLANGE MOUNTING



## 2.2 LUBRICATION

**TGPL** – TH Series gearbox inner parts are flash lubricated and models TH20, 25, 30 & 35 are filled with long life Synthetic oil and the other models TH40, 50, 60 & 80 are filled with mineral oil. In case of ambient temperature under -15°C or over 50°C, please consult our technical team.

### LUBRICANT DETAILS

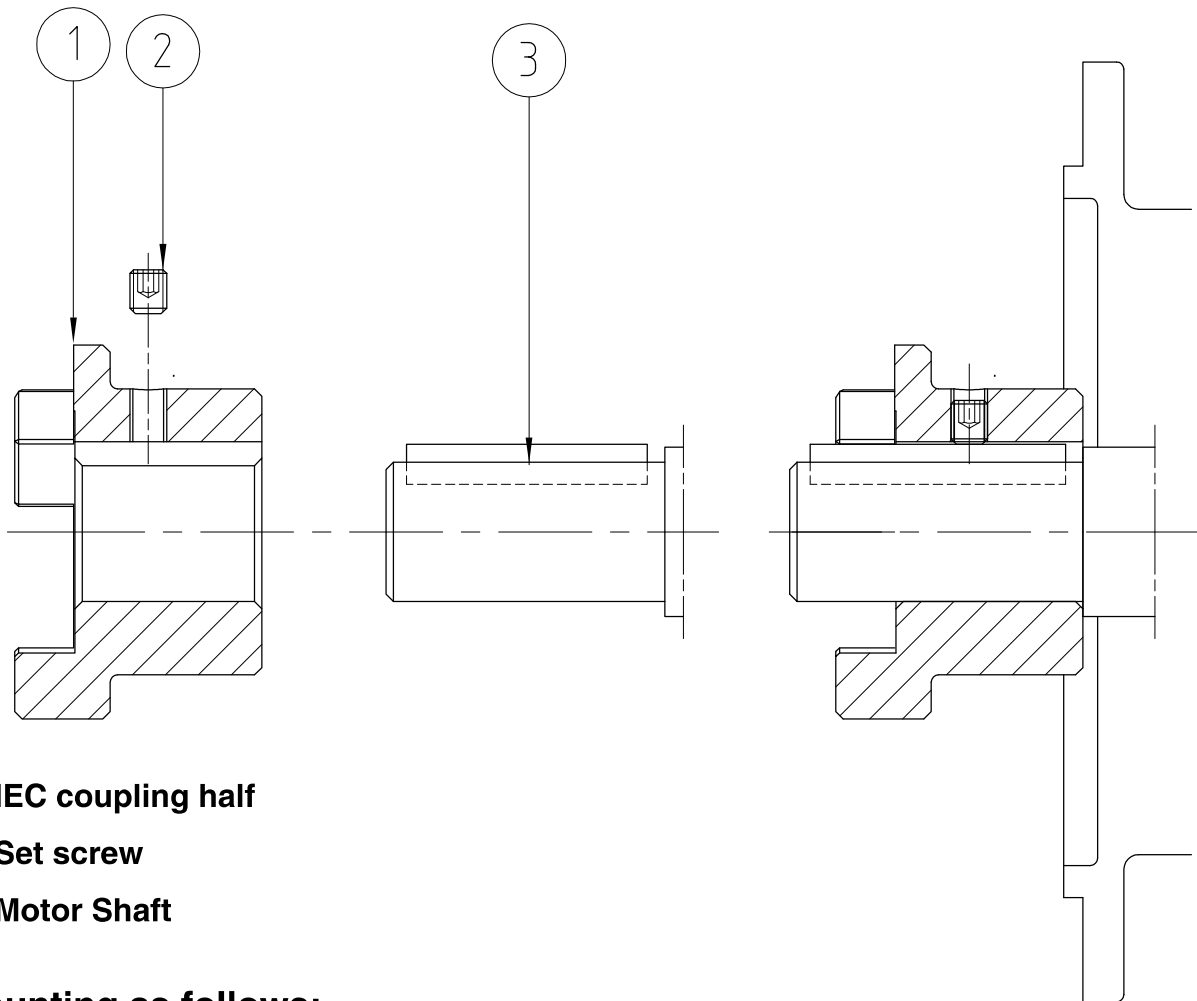
MODEL	GRADE			OIL TYPE	AMBIENT TEMPERATURE	
	LIGHT DUTY	NORMAL DUTY	HEAVY DUTY			
TH20 TO TH35	150	220	320	SYNTHETIC OIL	-15°C	+50°C
TH40 TO TH80	220	220	320	MINERAL OIL		

### Quantity of Lubricant (Ltrs)

Model	MOUNTING POSITIONS								
	B3	B6	B7	B8	V5	V6	B5	V1	V3
TH20-2	0.4	0.37	0.37	0.37	0.45	0.55	0.4	0.45	0.55
TH20-3	0.4	0.37	0.37	0.37	0.6	0.5	0.4	0.65	0.55
TH25-2	0.7	0.65	0.65	0.65	0.75	0.85	0.55	0.6	0.83
TH25-3	0.75	0.7	0.7	0.7	1.0	0.85	0.6	0.88	0.85
TH30-2	0.9	0.85	0.85	0.85	1.0	1.3	0.9	1.0	1.3
TH30-3	0.9	0.85	0.85	0.85	1.35	1.1	0.9	1.35	1.15
TH35-2	1.2	1.1	1.1	1.0	1.3	1.7	1.2	1.3	1.7
TH35-3	1.2	1.1	1.1	1.0	1.8	1.75	1.2	1.8	1.75
TH40-2	2.0	1.9	1.9	1.85	2.5	3.1	2.0	2.5	3.1
TH40-3	2.0	1.9	1.9	1.85	3.3	3.0	2.0	3.0	2.9
TH50-2	3.25	3.1	3.1	3.0	3.8	4.5	2.75	3.5	4.6
TH50-3	3.25	3.1	3.1	3.0	4.7	5.3	2.8	4.8	5.3
TH60-2	7.0	6.7	6.9	6.7	8.0	9.8	6.0	7.0	9.0
TH60-3	7.0	6.7	6.9	6.7	10.5	11.5	6.0	9.5	11.3
TH80-2	12.0	11.5	11.8	11.5	13.7	16.8	10.0	11.6	15
TH80-3	12.0	11.5	11.8	11.5	18	19.7	10.0	15.8	18.8

## 2.3 IEC INPUT COUPLING

### Mounting the IEC Input coupling



**(1) IEC coupling half**

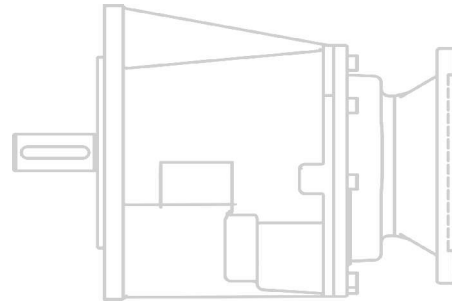
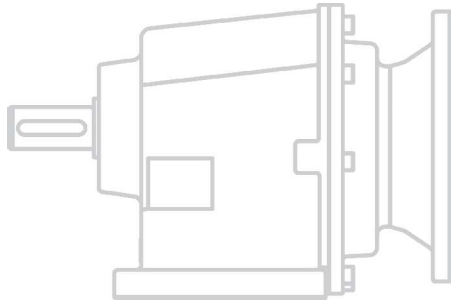
**(2) Set screw**

**(3) Motor Shaft**

#### Mounting as follows:

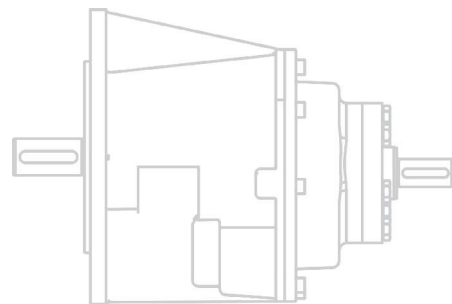
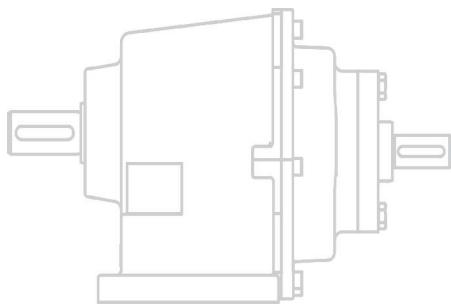
1. Clean the motor shaft and flange surfaces of the motor and gearbox.
2. Heat the coupling half (1) to approx. 80°C to 100°C and push the coupling half onto the motor shaft until stop at motor shaft shoulder.
3. Secure the key and coupling half using the set screw(2) on the motor shaft.
4. Seal the contact surfaces between the gearbox flange and motor using a suitable sealing compound
5. Mount the motor on the gearbox flange. Ensure that the coupling claws of the input shaft are engaged in the plastic spider.

IEC	63/71	80/90	100-225
Screw	M4	M5	M6



## 2.4 TH SERIES

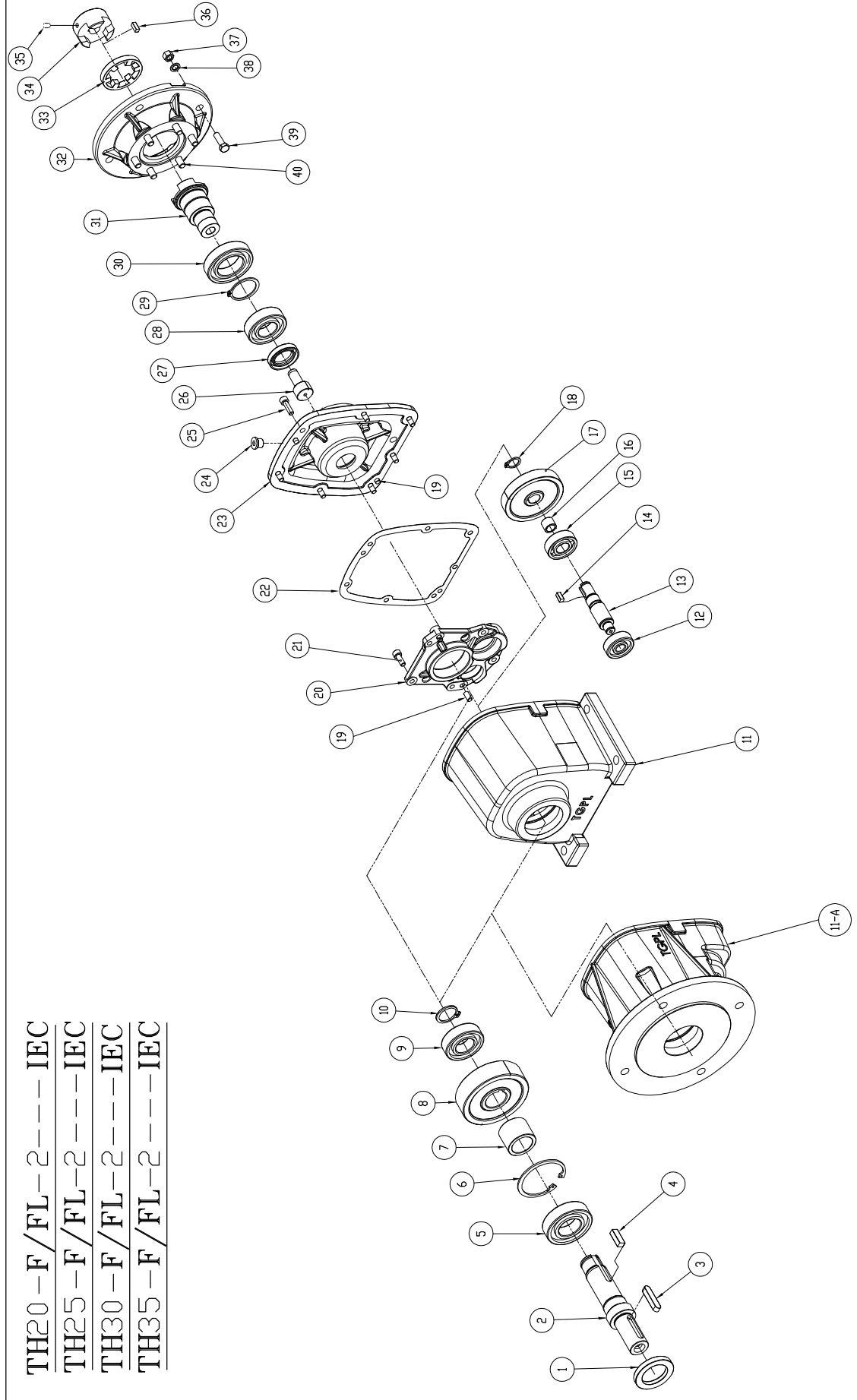
## EXPLODED VIEW

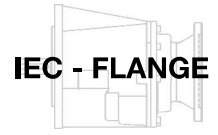


# TH SERIES EXPLODED VIEW

TH20-F/FL-2---IEC  
 TH25-F/FL-2---IEC  
 TH30-F/FL-2---IEC  
 TH35-F/FL-2---IEC

TH20-TH25-TH30-TH35-FOOT/FLANGE MOUNTING-TWO STAGE-INPUT IEC FLANGE





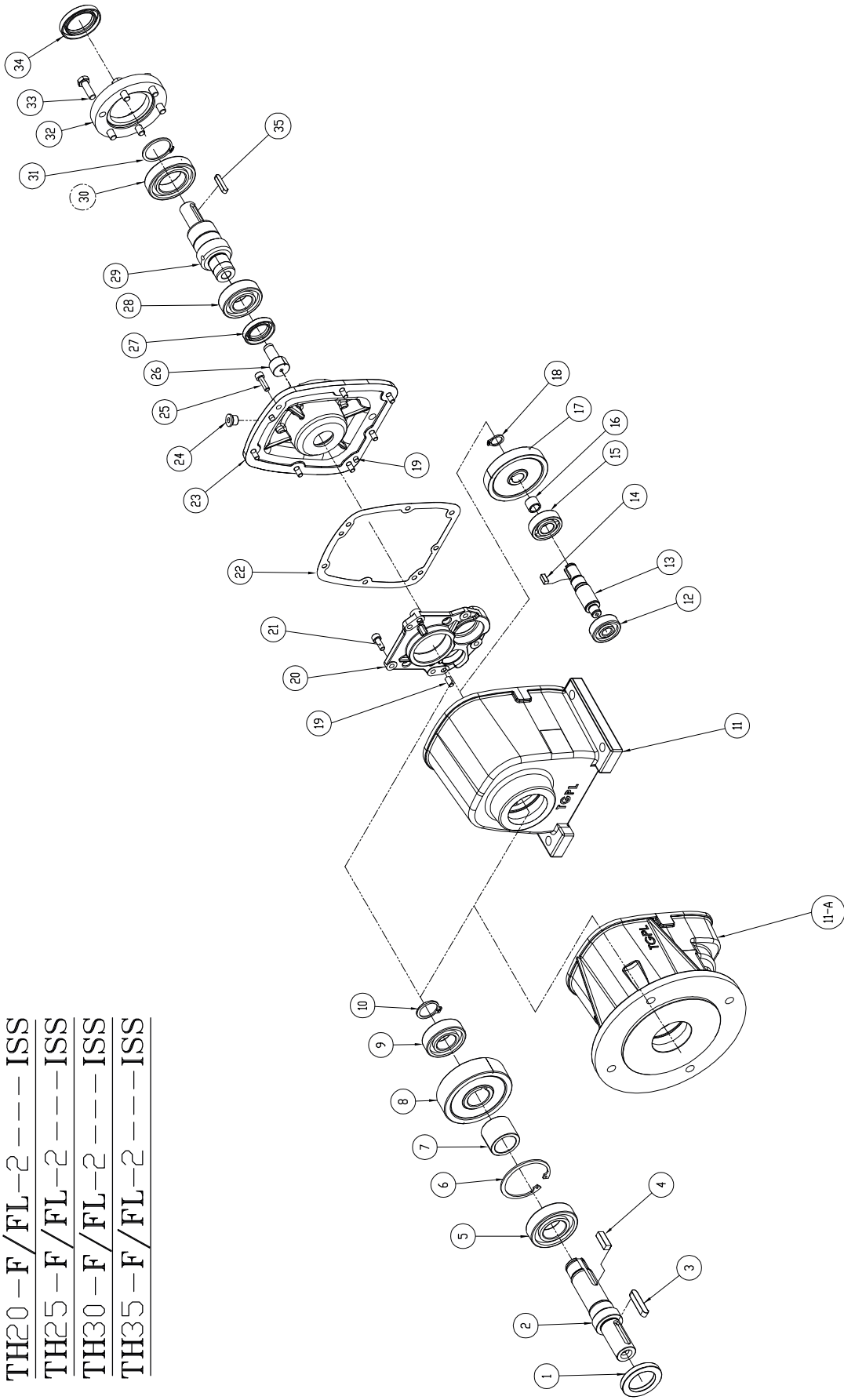
**TH20, TH25, TH30 & TH35**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 2 STAGE - IEC**

PART NO.	PART DESCRIPTION	QTY	TH20-2 - IEC	TH25-2 - IEC	TH30-2 - IEC	TH35-2 - IEC
1	OILSEAL	1	25x40x7	35x52x7	40x55x7	45x65x8
2	OUTPUT SHAFT	1	20 O/P SHAFT	25 O/P SHAFT	30 O/P SHAFT	35 O/P SHAFT
3	ROUND END KEY	1	KEY	KEY	KEY	KEY
4	SQ. END KEY	1	KEY	KEY	KEY	KEY
5	DEEP GROOVE BALL BRG	1	6204-2RS	6206-2RS	6207-2RS	6208-2RS
6	CIRCLIP BORE (B) TYPE	1	47x1.75 (S)	62x2 (S)	72x2.5 (S)	80x2.5 (S)
7	O/P SPACER (O/P SHAFT BUSH)	1	20 O/P SPACER	25 O/P SPACER	30 O/P SPACER	35 O/P SPACER
8	OUTPUT GEAR	1	20 O/P GEAR	25 O/P GEAR	30 O/P GEAR	35 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6203	6205	6206	6207
10	CIRCLIP SHAFT (A) TYPE	1	17x1.5 (HEAVY)	25x2 (HEAVY)	30x2 (HEAVY)	35x2.5 (HEAVY)
11	FOOT MOUNTED CASING	1	20 FOOT CASING	25 FOOT CASING	30 FOOT CASING	35 FOOT CASING
11A	FLANGE MOUNTED CASING	1	20 FLANGE CASING	25 FLANGE CASING	30 FLANGE CASING	35 FLANGE CASING
12	DEEP GROOVE BALL BRG	1	6201	6301	6302	6303
13	OUTPUT PINION	1	20 O/P PINION	25 O/P PINION	30 O/P PINION	35 O/P PINION
14	SQ. END KEY	1	KEY	KEY	KEY	KEY
15	DEEP GROOVE BALL BRG	1	6301	6302	6303	6304
16	INT. SPACER (PINION BUSH)	1	20 INT. SPACER	25 INT. SPACER	30 INT. SPACER	35 INT. SPACER
17	INPUT GEAR	1	20 I/P GEAR	25 I/P GEAR	30 I/P GEAR	35 I/P GEAR
18	CIRCLIP SHAFT (A) TYPE	1	12x1.5 (HEAVY)	15x1.5 (HEAVY)	17x1.5 (HEAVY)	20x1.75 (HEAVY)
19	CYLINDRICAL PIN	4	6x16	6x16	8x20	8x20
20	INTERMEDIATE PLATE	1	20 INT. PLATE	25 INT. PLATE	30 INT. PLATE	35 INT. PLATE
21	HEX.SOC. HEAD SCREW	4(or)5	SCREW (4 NOS)	SCREW (5 NOS)	SCREW (5 NOS)	SCREW (5 NOS)
22	INTERMEDIATE GASKET	1	20 INT. GASKET	25 INT. GASKET	30 INT. GASKET	35 INT. GASKET
23	2 STAGE INPUT HOUSING	1	20 - 2 ST HOUSING	25 - 2 ST HOUSING	30 - 2 ST HOUSING	35 - 2 ST HOUSING
24	OIL PLUG	2	M10x1	M10x1	M10x1	M10x1
25	HEX.SOC. HEAD SCREW	7	SCREW	SCREW	SCREW	SCREW
26	INPUT PINION	1	20 I/P PINION	25 I/P PINION	30 I/P PINION	35 I/P PINION
27	OIL SEAL	1	25x40x7	25x40x7	30x47x7	30x47x7
28	DEEP GROOVE BALL BRG	1	6205-2Z	6205-2Z	6206-2Z	6206-2Z
29	CIRCLIP SHAFT (A) TYPE	1	35x1.5 (S)	40x1.75 (S)	40x1.75(S)(6008-2Z) 45x1.75(S)(6009-2Z)	40x1.75(S)(6008-2Z) 45x1.75(S)(6009-2Z)
30	DEEP GROOVE BALL BRG	1	6007-2Z	6008-2Z	6008-2Z (71,80&90) 6009-2Z (100/ 112)	6008-2Z (71,80&90) 6009-2Z (100/ 112)
31	IEC INPUT SHAFT	1	20 IEC I/P SHAFT	25 IEC I/P SHAFT	30 IEC I/P SHAFT	35 IEC I/P SHAFT
32	IEC MOTOR FLANGE	1	63(or)71(or)80/90	63(or)71(or)80/90	71(or)80/90(or)100/112	71(or)80/90(or)100/112
33	COUPLING SPIDER (RUBBER BUSH)	1	20 COUPLING SPIDER	25 COUPLING SPIDER	30 COUPLING SPIDER	35 COUPLING SPIDER
34	COUPLING	1	20 COUPLING	25 COUPLING	30 COUPLING	35 COUPLING
35	CRUB SCREW	1	SCREW	SCREW	SCREW	SCREW
36	HALF ROUND KEY ( 90 FRAME )	1	8x7x20.5 (22-32HRC)	NA	NA	NA
37 & 38	NUT & SPRING WASHER	4	NUT	NUT	NUT	NUT
39	HEX BOLT	4	BOLT	BOLT	BOLT	BOLT
40	HEX.SOC.HEAD SCREW	6	SCREW	SCREW	SCREW	SCREW

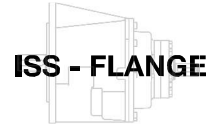
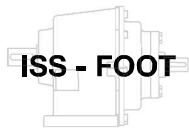
# TH SERIES EXPLODED VIEW

TH20-F/FL-2- - - - ISS  
TH25-F/FL-2- - - - ISS  
TH30-F/FL-2- - - - ISS  
TH35-F/FL-2- - - - ISS



TH20 - TH25 - TH30 - TH35 - FOOT/FLANGE MOUNTING - TWO STAGE - INPUT SOLID SHAFT





**TH20, TH25, TH30 & TH35**

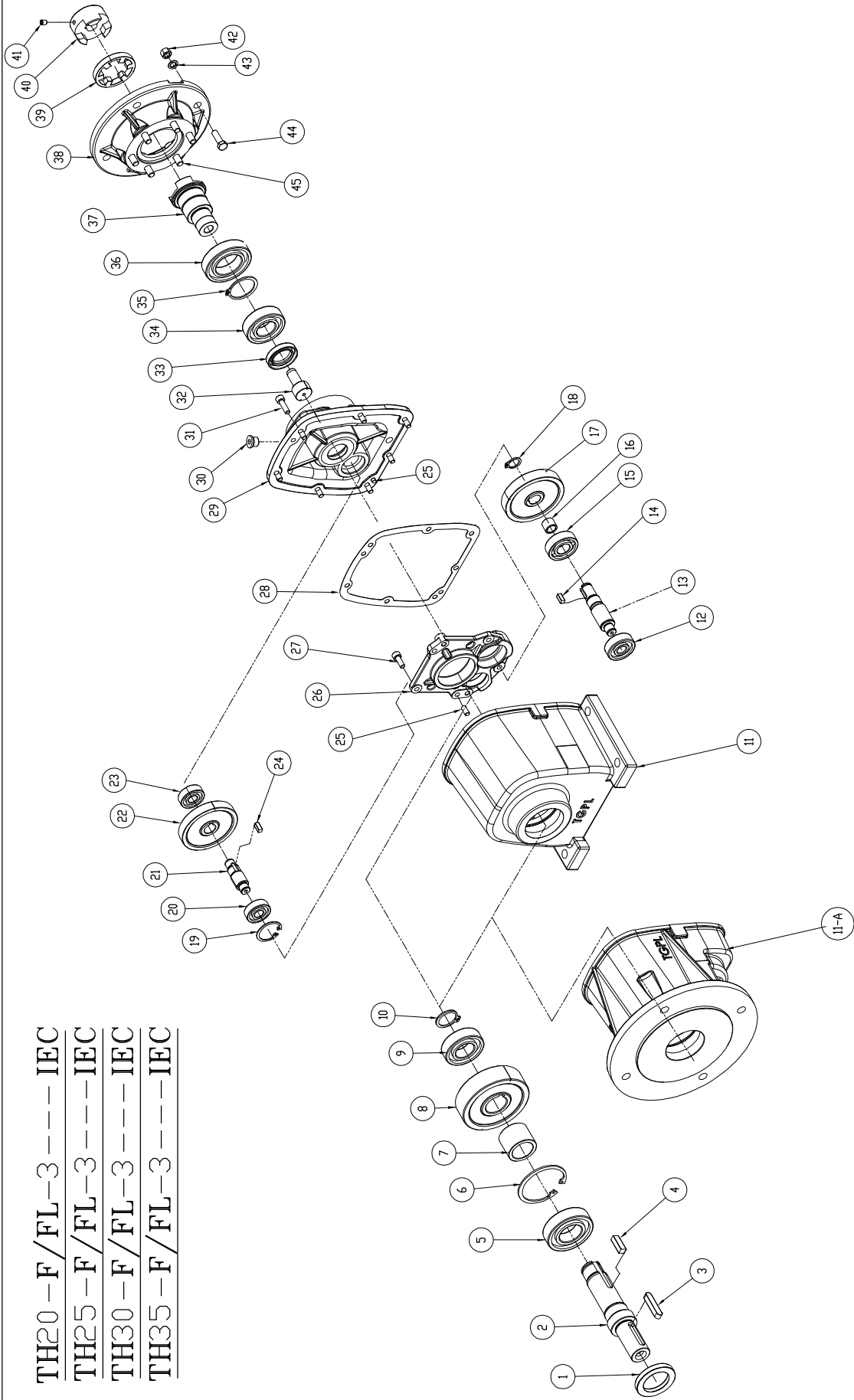
**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 2 STAGE - ISS**

PART NO.	PART DESCRIPTION	QTY	TH20-2 - ISS	TH25-2 - ISS	TH30-2 - ISS	TH35-2 - ISS
1	OILSEAL	1	25x40x7	35x52x7	40x55x7	45x65x8
2	OUTPUT SHAFT	1	20 O/P SHAFT	25 O/P SHAFT	30 O/P SHAFT	35 O/P SHAFT
3	ROUND END KEY	1	KEY	KEY	KEY	KEY
4	SQ. END KEY	1	KEY	KEY	KEY	KEY
5	DEEP GROOVE BALL BRG	1	6204-2RS	6206-2RS	6207-2RS	6208-2RS
6	CIRCLIP BORE (B) TYPE	1	47x1.75 (S)	62x2 (S)	72x2.5 (S)	80x2.5 (S)
7	O/P SPACER (O/P SHAFT BUSH)	1	20 O/P SPACER	25 O/P SPACER	30 O/P SPACER	35 O/P SPACER
8	OUTPUT GEAR	1	20 O/P GEAR	25 O/P GEAR	30 O/P GEAR	35 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6203	6205	6206	6207
10	CIRCLIP SHAFT (A) TYPE	1	17x1.5 (HEAVY)	25x2 (HEAVY)	30x2 (HEAVY)	35x2.5 (HEAVY)
11	FOOT MOUNTED CASING	1	20 FOOT CASING	25 FOOT CASING	30 FOOT CASING	35 FOOT CASING
11A	FLANGE MOUNTED CASING	1	20 FLANGE CASING	25 FLANGE CASING	30 FLANGE CASING	35 FLANGE CASING
12	DEEP GROOVE BALL BRG	1	6201	6301	6302	6303
13	OUTPUT PINION	1	20 O/P PINION	25 O/P PINION	30 O/P PINION	35 O/P PINION
14	SQ. END KEY	1	KEY	KEY	KEY	KEY
15	DEEP GROOVE BALL BRG	1	6301	6302	6303	6304
16	INT. SPACER (PINION BUSH)	1	20 INT. SPACER	25 INT. SPACER	30 INT. SPACER	35 INT. SPACER
17	INPUT GEAR	1	20 I/P GEAR	25 I/P GEAR	30 I/P GEAR	35 I/P GEAR
18	CIRCLIP SHAFT (A) TYPE	1	12x1.5 (HEAVY)	15x1.5 (HEAVY)	17x1.5 (HEAVY)	20x1.75 (HEAVY)
19	CYLINDRICAL PIN	4	6x16	6x16	8x20	8x20
20	INTERMEDIATE PLATE	1	20 INT. PLATE	25 INT. PLATE	30 INT. PLATE	35 INT. PLATE
21	HEX.SOC. HEAD SCREW	4(or)5	SCREW (4 NOS)	SCREW (5 NOS)	SCREW (5 NOS)	SCREW (5 NOS)
22	INTERMEDIATE GASKET	1	20 INT. GASKET	25 INT. GASKET	30 INT. GASKET	35 INT. GASKET
23	2STAGE INPUT HOUSING	1	20 - 2 ST HOUSING	25 - 2 ST HOUSING	30 - 2 ST HOUSING	35 - 2 ST HOUSING
24	OIL PLUG	2	M10x1	M10x1	M10x1	M10x1
25	HEX.SOC. HEAD SCREW	7	SCREW	SCREW	SCREW	SCREW
26	INPUT PINION	1	20 I/P PINION	25 I/P PINION	30 I/P PINION	35 I/P PINION
27	OIL SEAL	1	25x40x7	25x40x7	30x47x7	30x47x7
28	DEEP GROOVE BALL BRG	1	6205-2Z	6205-2Z	6206-2Z	6206-2Z
29	ISS INPUT SHAFT	1	20 ISS I/P SHAFT	25 ISS I/P SHAFT	30 ISS I/P SHAFT	35 ISS I/P SHAFT
30	DEEP GROOVE BALL BRG	1	6007-2Z	6008-2Z	6008-2Z	6009-2Z
31	CIRCLIP SHAFT (A) TYPE	1	35x1.5 (S)	40x1.75 (S)	40x1.75 (S)	45x1.75 (S)
32	ISS INPUT FLANGE	1	20 ISS I/P FLANGE	25 ISS I/P FLANGE	30 ISS I/P FLANGE	35 ISS I/P FLANGE
33	HEX. HEAD SCREW	6	SCREW	SCREW	SCREW	SCREW
34	OILSEAL	1	35x52x7	40x55x7	40x55x 7	45x65x7
35	ROUND END KEY	1	KEY	KEY	KEY	KEY

# TH SERIES EXPLODED VIEW

TH20-F/FL-3---IEC  
 TH25-F/FL-3---IEC  
 TH30-F/FL-3---IEC  
 TH35-F/FL-3---IEC

TH20-TH25-TH30-TH35-FOOT/FLANGE MOUNTING-THREE STAGE-INPUT IEC SHAFT





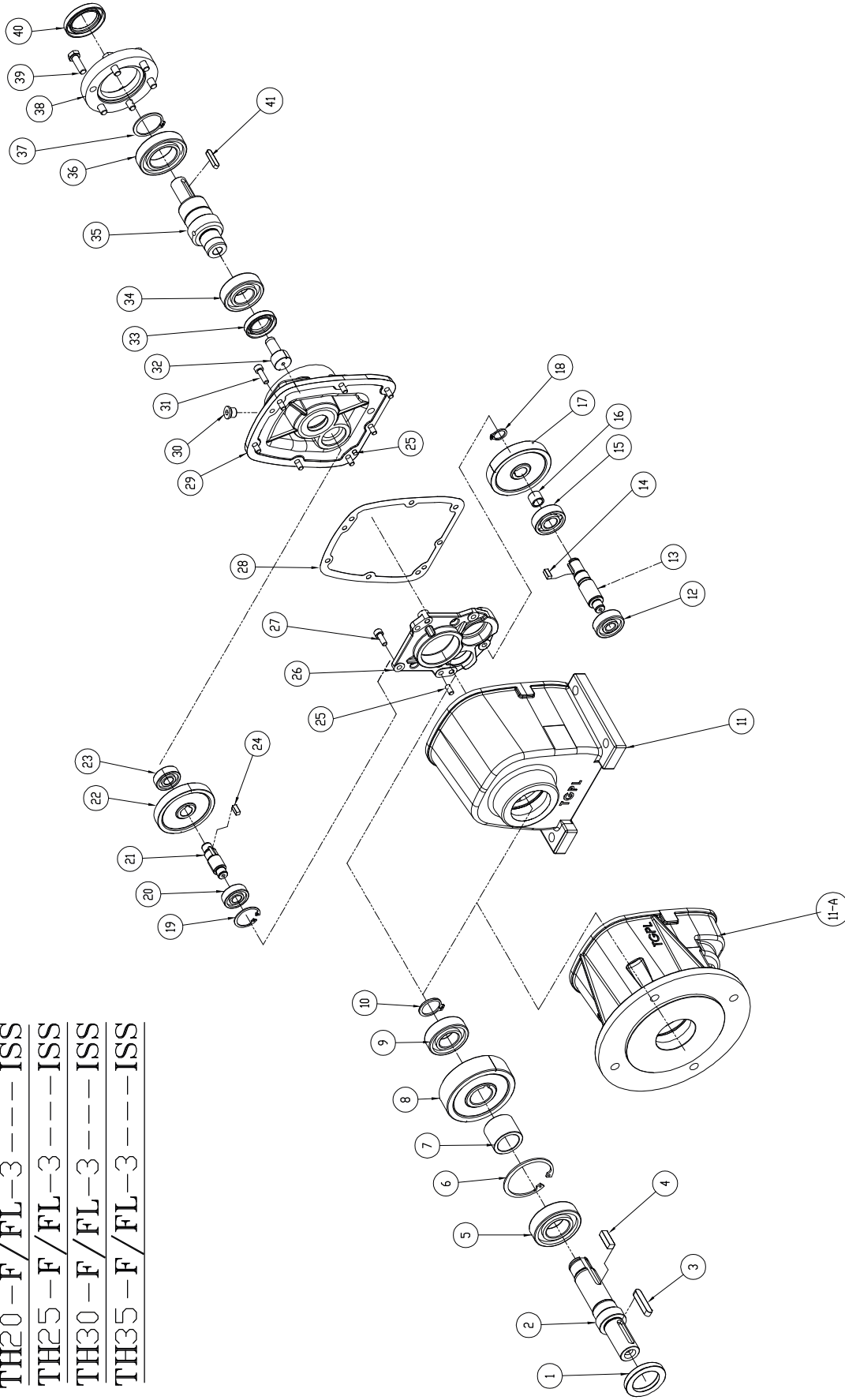
**TH20, TH25, TH30 & TH35**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 3 STAGE - IEC**

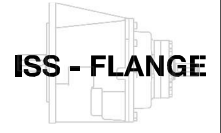
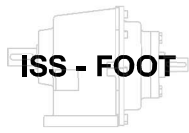
PART NO.	PART DESCRIPTION	QTY	TH20-3 - IEC	TH25-3 - IEC	TH30-3 - IEC	TH35-3 - IEC
1	OILSEAL	1	25x40x7	35x52x7	40x55x7	45x65x8
2	OUTPUT SHAFT	1	20 O/P SHAFT	25 O/P SHAFT	30 O/P SHAFT	35 O/P SHAFT
3	ROUND END KEY	1	KEY	KEY	KEY	KEY
4	SQ. END KEY	1	KEY	KEY	KEY	KEY
5	DEEP GROOVE BALL BRG	1	6204-2RS	6206-2RS	6207-2RS	6208-2RS
6	CIRCLIP BORE (B) TYPE	1	47x1.75 (S)	62x2 (S)	72x2.5 (S)	80x2.5 (S)
7	O/P SPACER (O/P SHAFT BUSH)	1	20 O/P SPACER	25 O/P SPACER	30 O/P SPACER	35 O/P SPACER
8	OUTPUT GEAR	1	20 O/P GEAR	25 O/P GEAR	30 O/P GEAR	35 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6203	6205	6206	6207
10	CIRCLIP SHAFT (A) TYPE	1	17x1.5 (HEAVY)	25x2 (HEAVY)	30x2 (HEAVY)	35x2.5 (HEAVY)
11	FOOT MOUNTED CASING	1	20 FOOT CASING	25 FOOT CASING	30 FOOT CASING	35 FOOT CASING
11A	FLANGE MOUNTED CASING	1	20 FLANGE CASING	25 FLANGE CASING	30 FLANGE CASING	35 FLANGE CASING
12	DEEP GROOVE BALL BRG	1	6201	6301	6302	6303
13	OUTPUT PINION	1	20 O/P PINION	25 O/P PINION	30 O/P PINION	35 O/P PINION
14	SQ. END KEY	1	KEY	KEY	KEY	KEY
15	DEEP GROOVE BALL BRG	1	6301	6302	6303	6304
16	INT. SPACER (PINION BUSH)	1	20 INT. SPACER	25 INT. SPACER	30 INT. SPACER	35 INT. SPACER
17	INTERMEDIATE GEAR	1	20 INT. GEAR	25 INT. GEAR	30 INT. GEAR	35 INT. GEAR
18	CIRCLIP SHAFT (A) TYPE	1	12x1.5 (HEAVY)	15x1.5 (HEAVY)	17x1.5 (HEAVY)	20x1.75 (HEAVY)
19	CIRCLIP BORE (B) TYPE	1	30x1.2 (S)	32x1.2 (S)	35x1.5 (S)	40x1.75 (S)
20	DEEP GROOVE BALL BRG	1	6200	6201	6202	6203
21	INTERMEDIATE PINION	1	20 INT. PINION	25 INT. PINION	30 INT. PINION	35 INT. PINION
22	INPUT GEAR	1	20 I/P GEAR	25 I/P GEAR	30 I/P GEAR	35 I/P GEAR
23	DEEP GROOVE BALL BRG	1	6000-2RS	6201-2RS	6301-2RS	6202-2RS
24	SQ. END KEY	1	KEY	KEY	KEY	KEY
25	CYLINDRICAL PIN	4	6x16	6x16	8x20	8x20
26	INTERMEDIATE PLATE	1	20 INT. PLATE	25 INT. PLATE	30 INT. PLATE	35 INT. PLATE
27	HEX.SOC. HEAD SCREW	4 (or) 5	SCREW (4 NOS)	SCREW (5 NOS)	SCREW (5 NOS)	SCREW (5 NOS)
28	INTERMEDIATE GASKET	1	20 INT. GASKET	25 INT. GASKET	30 INT. GASKET	35 INT. GASKET
29	3 STAGE INPUT HOUSING	1	20 - 3 ST HOUSING	25 - 3 ST HOUSING	30 - 3 ST HOUSING	35 - 3 ST HOUSING
30	OIL PLUG	2	M10x1	M10x1	M10x1	M10x1
31	HEX.SOC. HEAD SCREW	7	SCREW	SCREW	SCREW	SCREW
32	INPUT PINION	1	20 I/P PINION	25 I/P PINION	30 I/P PINION	35 I/P PINION
33	OIL SEAL	1	25x40x7	25x40x7	25x40x7	30x47x7
34	DEEP GROOVE BALL BRG	1	6005-2Z	6005-2Z	6205-2Z	6206-2Z
35	CIRCLIP SHAFT (A) TYPE	1	35x1.5 (S)	35x1.5 (S)	40x1.75 (S)	40x1.75 (S)
36	DEEP GROOVE BALL BRG	1	6007-2Z	6007-2Z	6008-2Z	6008-2Z
37	IEC INPUT SHAFT	1	20 IEC I/P SHAFT	25 IEC I/P SHAFT	30 IEC I/P SHAFT	35 IEC I/P SHAFT
38	IEC MOTOR FLANGE	1	63(or)71	63(or)71(or)80	63(or)71(or)80/90	63(or)71(or)80/90
39	COUPLING SPIDER (RUBBER BUSH)	1	20 COUPLING SPIDER	25 COUPLING SPIDER	30 COUPLING SPIDER	35 COUPLING SPIDER
40	COUPLING	1	20 COUPLING	25 COUPLING	30 COUPLING	35 COUPLING
41	CRUB SCREW	1	SCREW	SCREW	SCREW	SCREW
42 & 43	NUT & SPRING WASHER	4	NUT	NUT	NUT	NUT
44	HEX BOLT	4	BOLT	BOLT	BOLT	BOLT
45	HEX.SOC.HEAD SCREW	6	SCREW	SCREW	SCREW	SCREW

# TH SERIES EXPLODED VIEW

TH20 - F / FL - 3 - - - - ISS  
TH25 - F / FL - 3 - - - - ISS  
TH30 - F / FL - 3 - - - - ISS  
TH35 - F / FL - 3 - - - - ISS



TH20 - TH25 - TH30 - TH35 - FOOT / FLANGE MOUNTING - THREE STAGE - INPUT SOLID SHAFT



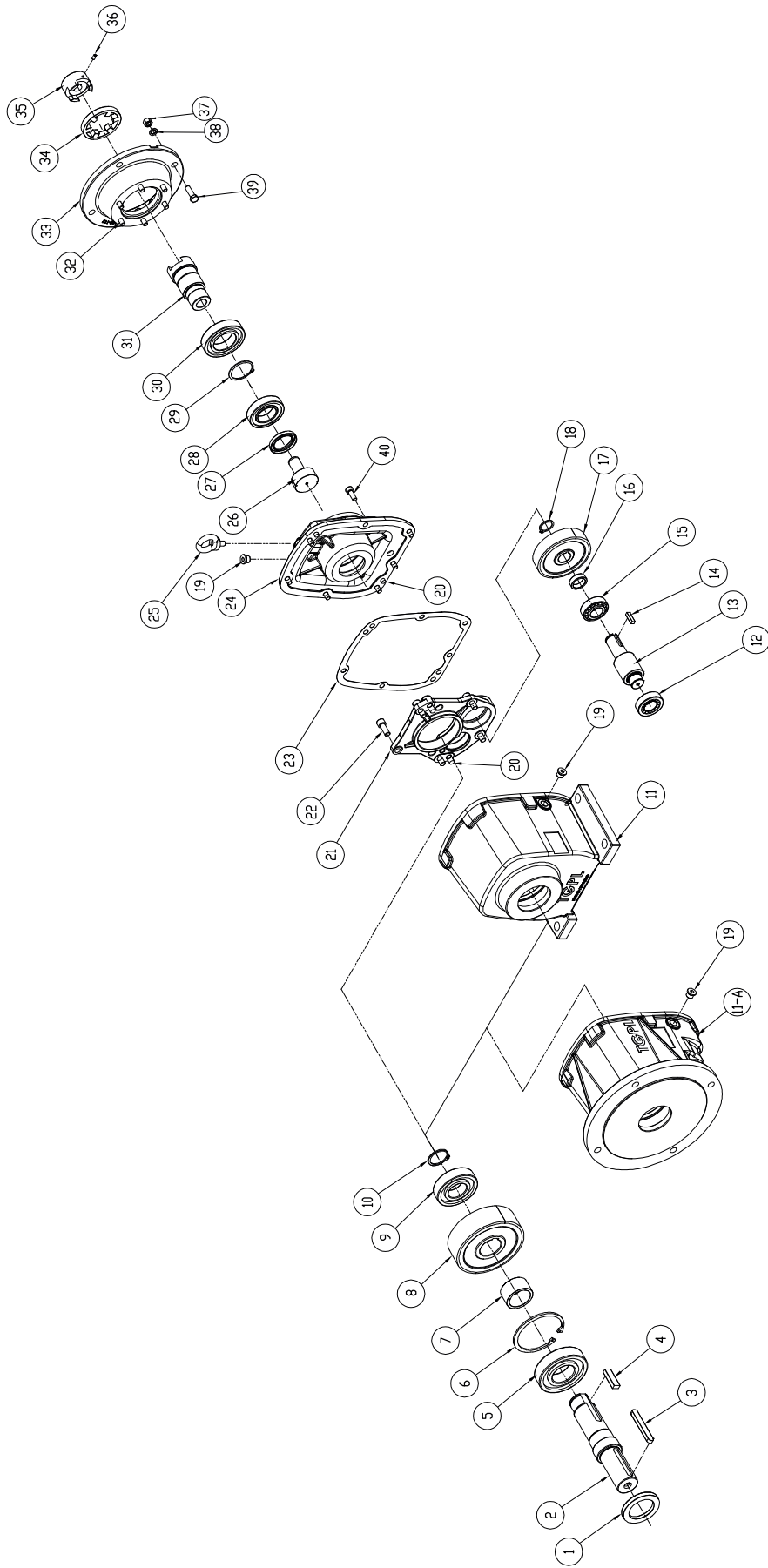
**TH20, TH25, TH30 & TH35**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 3 STAGE - ISS**

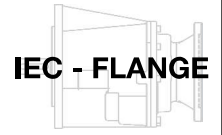
PART NO.	PART DESCRIPTION	QTY	TH20-3 - ISS	TH25-3 - ISS	TH30-3 - ISS	TH35-3 - ISS
1	OILSEAL	1	25x40x7	35x52x7	40x55x7	45x65x8
2	OUTPUT SHAFT	1	20 O/P SHAFT	25 O/P SHAFT	30 O/P SHAFT	35 O/P SHAFT
3	ROUND END KEY	1	KEY	KEY	KEY	KEY
4	SQ. END KEY	1	KEY	KEY	KEY	KEY
5	DEEP GROOVE BALL BRG	1	6204-2RS	6206-2RS	6207-2RS	6208-2RS
6	CIRCLIP BORE (B) TYPE	1	47x1.75 (S)	62x2 (S)	72x2.5 (S)	80x2.5 (S)
7	O/P SPACER (O/P SHAFT BUSH)	1	20 O/P SPACER	25 O/P SPACER	30 O/P SPACER	35 O/P SPACER
8	OUTPUT GEAR	1	20 O/P GEAR	25 O/P GEAR	30 O/P GEAR	35 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6203	6205	6206	6207
10	CIRCLIP SHAFT (A) TYPE	1	17x1.5 (HEAVY)	25x2 (HEAVY)	30x2 (HEAVY)	35x2.5 (HEAVY)
11	FOOT MOUNTED CASING	1	20 FOOT CASING	25 FOOT CASING	30 FOOT CASING	35 FOOT CASING
11A	FLANGE MOUNTED CASING	1	20 FLANGE CASING	25 FLANGE CASING	30 FLANGE CASING	35 FLANGE CASING
12	DEEP GROOVE BALL BRG	1	6201	6301	6302	6303
13	OUTPUT PINION	1	20 O/P PINION	25 O/P PINION	30 O/P PINION	35 O/P PINION
14	SQ. END KEY	1	KEY	KEY	KEY	KEY
15	DEEP GROOVE BALL BRG	1	6301	6302	6303	6304
16	INT. SPACER (PINION BUSH)	1	20 INT. SPACER	25 INT. SPACER	30 INT. SPACER	35 INT. SPACER
17	INTERMEDIATE GEAR	1	20 INT. GEAR	25 INT. GEAR	30 INT. GEAR	35 INT. GEAR
18	CIRCLIP SHAFT (A) TYPE	1	12x1.5 (HEAVY)	15x1.5 (HEAVY)	17x1.5 (HEAVY)	20x1.75 (HEAVY)
19	CIRCLIP BORE (B) TYPE	1	30x1.2 (S)	32x1.2 (S)	35x1.5 (S)	40x1.75 (S)
20	DEEP GROOVE BALL BRG	1	6200	6201	6202	6203
21	INTERMEDIATE PINION	1	20 INT. PINION	25 INT. PINION	30 INT. PINION	35 INT. PINION
22	INPUT GEAR	1	20 I/P GEAR	25 I/P GEAR	30 I/P GEAR	35 I/P GEAR
23	DEEP GROOVE BALL BRG	1	6000-2RS	6201-2RS	6301-2RS	6202-2RS
24	SQ. END KEY	1	KEY	KEY	KEY	KEY
25	CYLINDRICAL PIN	4	6x16	6x16	8x20	8x20
26	INTERMEDIATE PLATE	1	20 INT. PLATE	25 INT. PLATE	30 INT. PLATE	35 INT. PLATE
27	HEX.SOC. HEAD SCREW	4(or)5	SCREW (4 NOS)	SCREW (5 NOS)	SCREW (5 NOS)	SCREW (5 NOS)
28	INTERMEDIATE GASKET	1	20 INT. GASKET	25 INT. GASKET	30 INT. GASKET	35 INT. GASKET
29	3 STAGE INPUT HOUSING	1	20 - 3 ST HOUSING	25 - 3 ST HOUSING	30 - 3 ST HOUSING	35 - 3 ST HOUSING
30	OIL PLUG	2	M10x1	M10x1	M10x1	M10x1
31	HEX.SOC. HEAD SCREW	7	SCREW	SCREW	SCREW	SCREW
32	INPUT PINION	1	20 I/P PINION	25 I/P PINION	30 I/P PINION	35 I/P PINION
33	OIL SEAL	1	25x40x7	25x40x7	25x40x7	30x47x7
34	DEEP GROOVE BALL BRG	1	6005-2Z	6005-2Z	6205-2Z	6206-2Z
35	ISS INPUT SHAFT	1	20 ISS I/P SHAFT	25 ISS I/P SHAFT	30 ISS I/P SHAFT	35 ISS I/P SHAFT
36	DEEP GROOVE BALL BRG	1	6007-2Z	6007-2Z	6008-2Z	6008-2Z
37	CIRCLIP SHAFT (A) TYPE	1	35x1.5 (S)	35x1.5 (S)	40x1.75 (S)	40x1.75 (S)
38	ISS INPUT FLANGE	1	20 ISS I/P FLANGE	25 ISS I/P FLANGE	30 ISS I/P FLANGE	35 ISS I/P FLANGE
39	HEX. HEAD SCREW	6	SCREW	SCREW	SCREW	SCREW
40	OILSEAL	1	35x52x7	35x52x7	40x55x7	40x55x7
41	ROUND END KEY	1	KEY	KEY	KEY	KEY

# TH SERIES EXPLODED VIEW

TH40-F/FL-2---IEC



TH40-F/FL-2---IEC



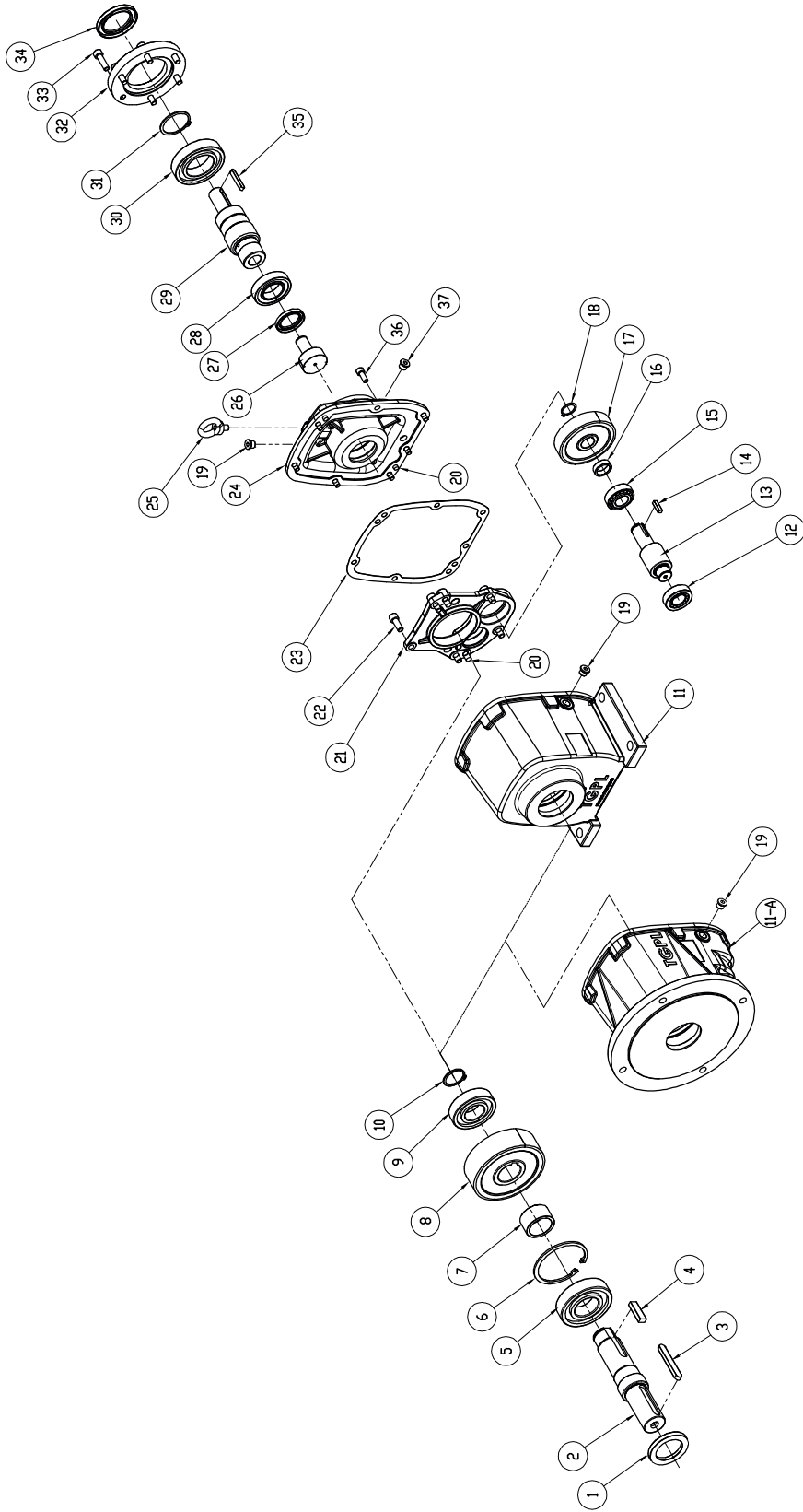
**TH40**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 2 STAGE - IEC**

PART NO.	PART DESCRIPTION	QTY	TH40-2 - IEC
1	OILSEAL	1	52x72x8
2	OUTPUT SHAFT	1	40 O/P SHAFT
3	ROUND END KEY	1	KEY
4	SQ. END KEY	1	KEY
5	DEEP GROOVE BALL BRG	1	6309-2RS
6	CIRCLIP BORE (B) TYPE	1	100x3 (S)
7	OUTPUT SPACER (OUTPUT SHAFT BUSH)	1	40 O/P SPACER
8	OUTPUT GEAR	1	40 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6308
10	CIRCLIP SHAFT (A) TYPE	1	40x2.5 (Heavy)
11	FOOT MOUNTED CASING	1	40 FOOT CASING
11A	FLANGE MOUNTED CASING	1	40 FLANGE CASING
12	DEEP GROOVE BALL BRG-	1	6305
13	OUTPUT PINION	1	40 O/P PINION
14	SQ. END KEY	1	KEY
15	DEEP GROOVE BALL BRG	1	6305
16	INTERMEDIATE SPACER (PINION BUSH)	1	40 INT. SPACER
17	INPUT GEAR	1	40 I/P GEAR
18	CIRCLIP SHAFT (A) TYPE	1	25x2 (Heavy)
19	OIL PLUG	4	M16x1.5
20	CYLINDRICAL PIN	4	10x20
21	INTERMEDIATE PLATE	1	40 INT. PLATE
22	HEX.SOC. HEAD SCREW	5	SCREW
23	INTERMEDIATE GASKET	1	40 INT. GASKET
24	2STAGE INPUT HOUSING	1	40 - 2 ST HOUSING
25	EYE BOLT	1	M10x20
26	INPUT PINION	1	40 I/P PINION
27	OIL SEAL	1	45x65x8
28	DEEP GROOVE BALL BRG	1	6209-2Z
29	CIRCLIP SHAFT (A) TYPE	1	55x2 (S)
30	DEEP GROOVE BALL BRG	1	6211-2Z
31	IEC INPUT SHAFT	1	40 IEC I/P SHAFT
32	HEX.SOC. HEAD SCREW	6	SCREW
33	IEC MOTOR FLANGE	1	90(or)100/112(or)132
34	COUPLING SPIDER (RUBBER BUSH)	1	40 COUPLING SPIDER
35	COUPLING	1	40 COUPLING
36	CRUB SCREW	1	SCREW
37 & 38	NUT & SPRING WASHER	4	NUT
39	BOLT	4	BOLT
40	HEX.SOC. HEAD SCREW	7	SCREW

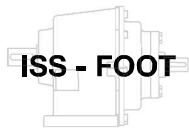
# TH SERIES EXPLODED VIEW

TH40-F/FL-2---ISS



TH40 - FOOT / FLANGE MOUNTING - TWO STAGE - INPUT SOLID SHAFT





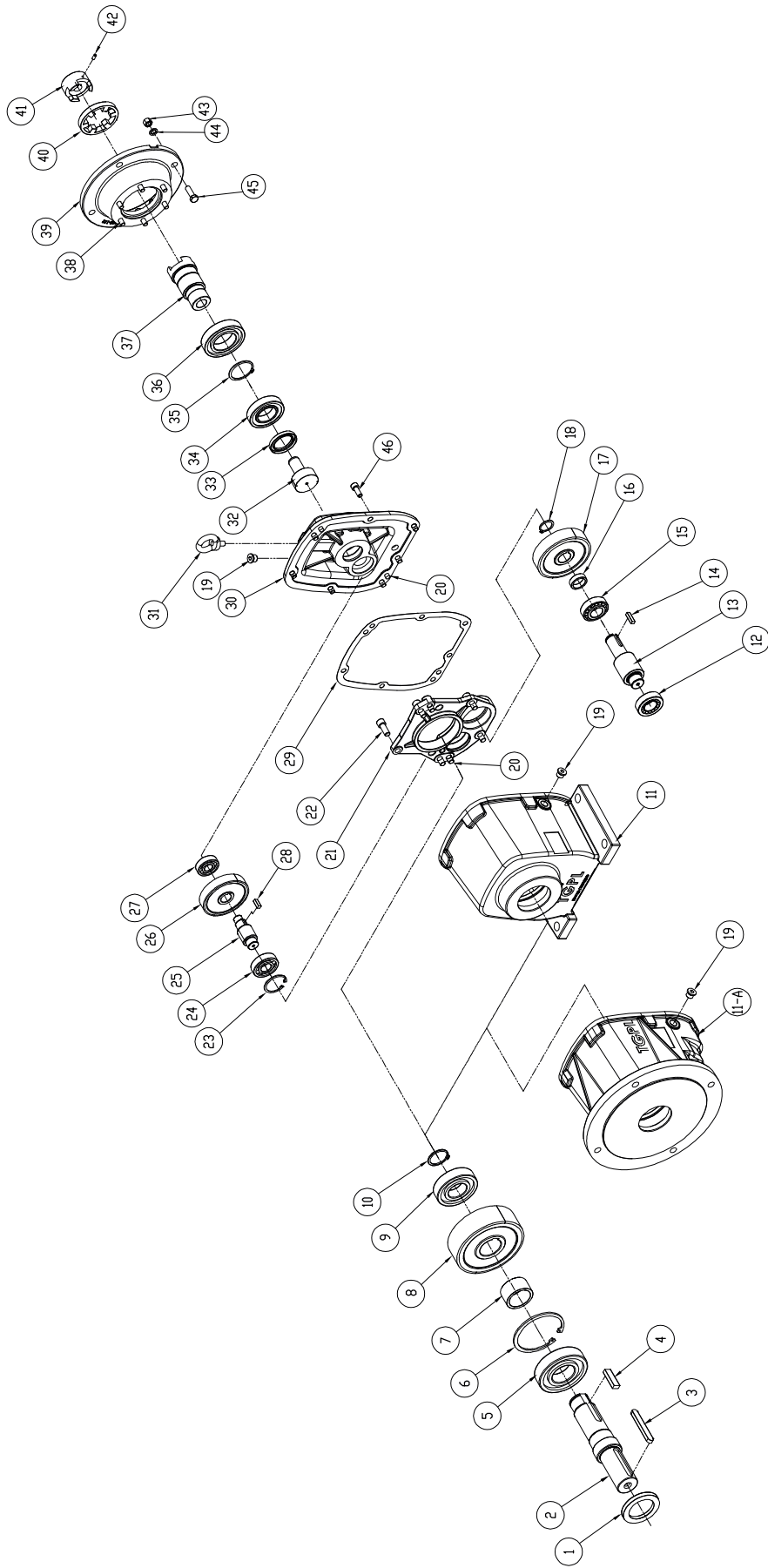
**TH40**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 2 STAGE - ISS**

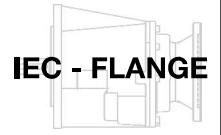
PART NO.	PART DESCRIPTION	QTY	TH40-2 - ISS
1	OILSEAL	1	52x72x8
2	OUTPUT SHAFT	1	40 O/P SHAFT
3	ROUND END KEY	1	KEY
4	SQ. END KEY	1	KEY
5	DEEP GROOVE BALL BRG	1	6309-2RS
6	CIRCLIP BORE (B) TYPE	1	100x3 (S)
7	OUTPUT SPACER (OUTPUT SHAFT BUSH)	1	40 O/P SPACER
8	OUTPUT GEAR	1	40 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6308
10	CIRCLIP SHAFT (A) TYPE	1	40x2.5 (Heavy)
11	FOOT MOUNTED CASING	1	40 FOOT CASING
11A	FLANGE MOUNTED CASING	1	40 FLANGE CASING
12	DEEP GROOVE BALL BRG	1	6305
13	OUTPUT PINION	1	40 O/P PINION
14	SQ. END KEY	1	KEY
15	DEEP GROOVE BALL BRG	1	6305
16	INTERMEDIATE SPACER (PINION BUSH)	1	40 INT. SPACER
17	INPUT GEAR	1	40 I/P GEAR
18	CIRCLIP SHAFT (A) TYPE	1	25x2 (Heavy)
19	OIL PLUG	4	M16x1.5
20	CYLINDRICAL PIN	4	10x20
21	INTERMEDIATE PLATE	1	40 INT. PLATE
22	HEX.SOC. HEAD SCREW	5	SCREW
23	INTERMEDIATE GASKET	1	40 INT. GASKET
24	2STAGE INPUT HOUSING	1	40 - 2 ST HOUSING
25	EYE BOLT	1	M10x20
26	INPUT PINION	1	40 I/P PINION
27	OIL SEAL	1	45x65x8
28	DEEP GROOVE BALL BRG	1	6209-2Z
29	ISS INPUT SHAFT	1	40 ISS I/P SHAFT
30	DEEP GROOVE BALL BRG	1	6211-2Z
31	CIRCLIP SHAFT (A) TYPE	1	55x2 (S)
32	ISS INPUT FLANGE	1	40 ISS I/P FLANGE
33	HEX. HEAD SCREW	6	SCREW
34	OIL SEAL	1	55x80x8
35	ROUND END KEY	1	KEY
36	HEX.SOC. HEAD SCREW	7	SCREW
37	PLUG	1	M10x1

# TH SERIES EXPLODED VIEW

TH40-F/FL-3---IEC



TH40-FOOT/FLANGE MOUNTING-THREE STAGE-INPUT IEC FLANGE



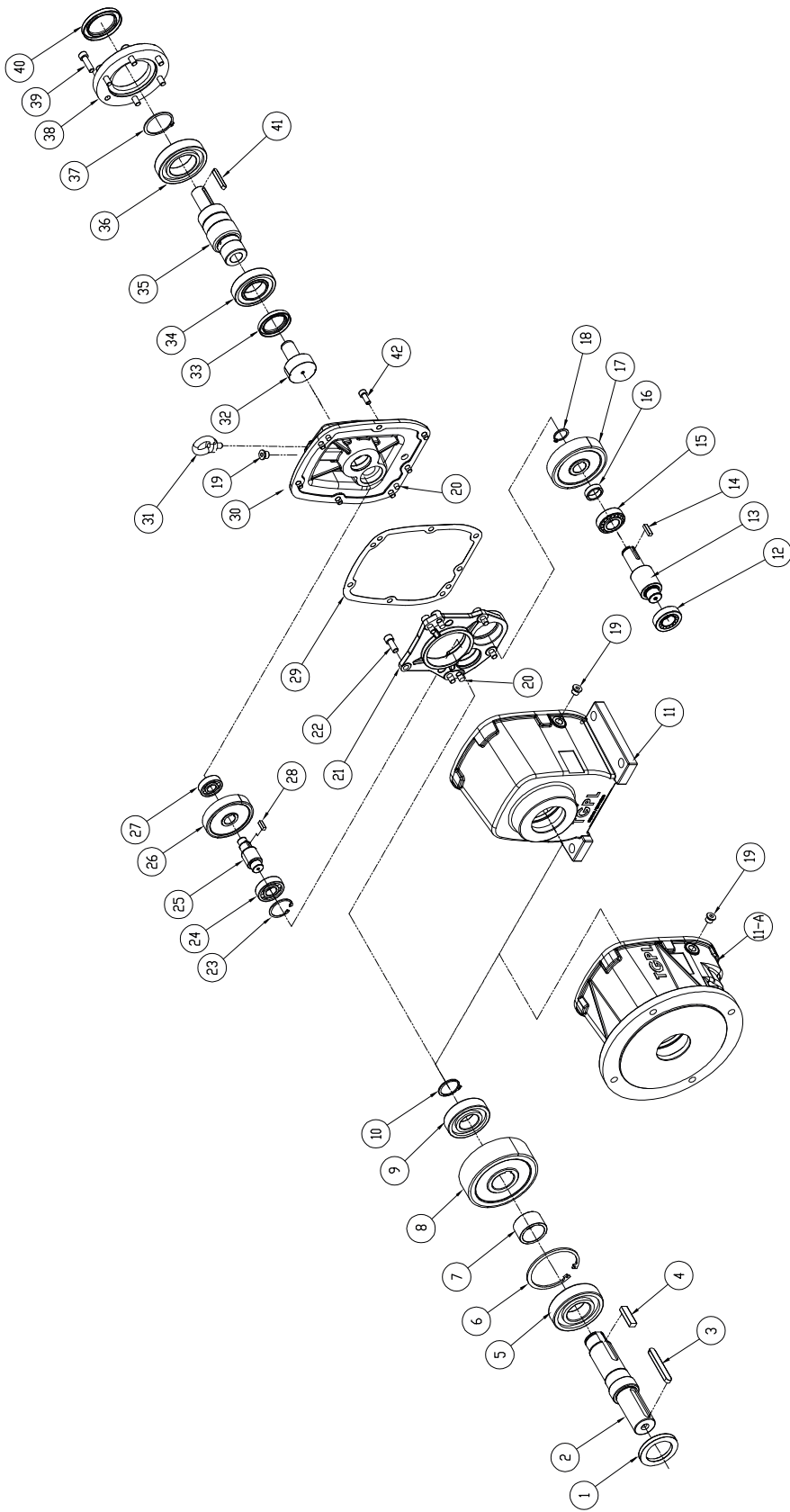
**TH40**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 3 STAGE - IEC**

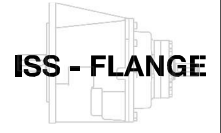
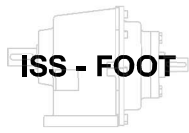
PART NO.	PART DESCRIPTION	QTY	TH40-3 - IEC
1	OILSEAL	1	52x72x8
2	OUTPUT SHAFT	1	40 O/P SHAFT
3	ROUND END KEY	1	KEY
4	SQ. END KEY	1	KEY
5	DEEP GROOVE BALL BRG	1	6309-2RS
6	CIRCLIP BORE (B) TYPE	1	100x3 (S)
7	OUTPUT SPACER (OUTPUT SHAFT BUSH)	1	40 O/P SPACER
8	OUTPUT GEAR	1	40 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6308
10	CIRCLIP SHAFT (A) TYPE	1	40x2.5 (Heavy)
11	FOOT MOUNTED CASING	1	40 FOOT CASING
11A	FLANGE MOUNTED CASING	1	40 FLANGE CASING
12	DEEP GROOVE BALL BRG	1	6305
13	OUTPUT PINION	1	40 O/P PINION
14	SQ. END KEY	1	KEY
15	DEEP GROOVE BALL BRG	1	6305
16	INTERMEDIATE SPACER (PINION BUSH)	1	40 INT. SPACER
17	INTERMEDIATE GEAR	1	40 INT. GEAR
18	CIRCLIP SHAFT (A) TYPE	1	25x2 (Heavy)
19	OIL PLUG	4	M16x1.5
20	CYLINDRICAL PIN	4	10x20
21	INTERMEDIATE PLATE	1	40 INT. PLATE
22	HEX.SOC. HEAD SCREW	5	SCREW
23	CIRCLIP BORE (B) TYPE	1	52x2 (S)
24	DEEP GROOVE BALL BRG	1	6304
25	INTERMEDIATE PINION	1	40 INT. PINION
26	INPUT GEAR	1	40 I/P GEAR
27	DEEP GROOVE BALL BRG	1	6303-2RS
28	SQ. END KEY	1	KEY
29	INTERMEDIATE GASKET	1	40 INT. GASKET
30	3 STAGE INPUT HOUSING	1	40 - 3 ST I/P HOUSING
31	EYE BOLT	1	M10x20
32	INPUT PINION	1	40 I/P PINION
33	OIL SEAL	1	30x47x7
34	DEEP GROOVE BALL BRG	1	6206-2Z
35	CIRCLIP SHAFT (A) TYPE	1	45x1.75 (S)
36	DEEP GROOVE BALL BRG	1	6009-2Z
37	IEC INPUT SHAFT	1	40 IEC I/P SHAFT
38	HEX.SOC.HEAD SCREW	6	SCREW
39	IEC MOTOR FLANGE	1	71(or)80/90(or)100
40	COUPLING SPIDER (RUBBER BUSH)	1	40 COUPLING SPIDER
41	COUPLING	1	40 COUPLING
42	CRUB SCREW	1	SCREW
43 & 44	NUT & SPRING WASHER	4	NUT
45	BOLT	4	BOLT
46	HEX.SOC. HEAD SCREW	7	SCREW

# TH SERIES EXPLODED VIEW

TH40-F/FL-3---ISS



TH40-F/FL-3---ISS



**TH40**

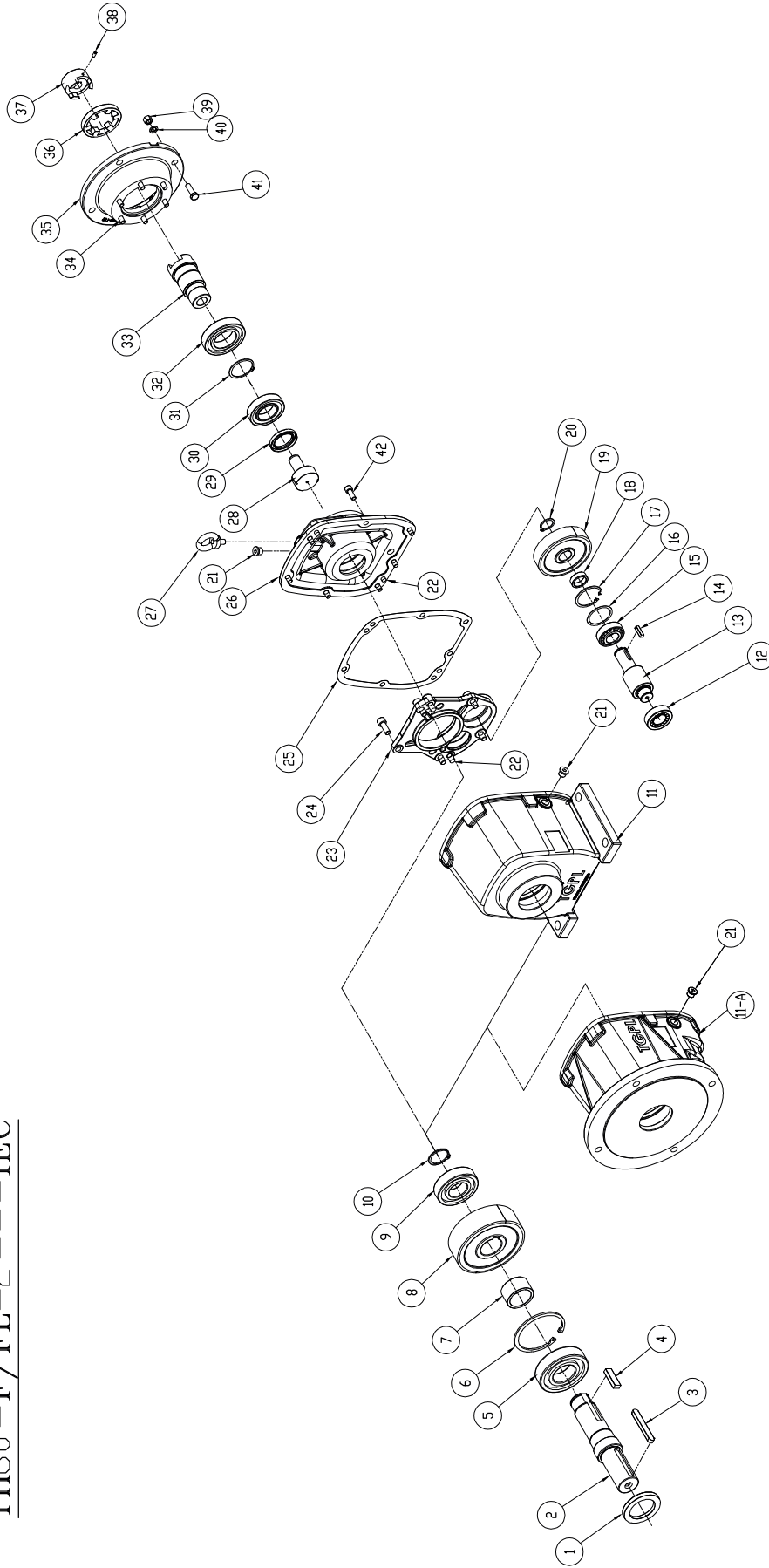
**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 3 STAGE - ISS**

PART NO.	PART DESCRIPTION	QTY	TH40-3 - ISS
1	OILSEAL	1	52x72x8
2	OUTPUT SHAFT	1	40 O/P SHAFT
3	ROUND END KEY	1	KEY
4	SQ. END KEY	1	KEY
5	DEEP GROOVE BALL BRG	1	6309-2RS
6	CIRCLIP BORE (B) TYPE	1	100x3 (S)
7	OUTPUT SPACER (OUTPUT SHAFT BUSH)	1	40 O/P SPACER
8	OUTPUT GEAR	1	40 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6308
10	CIRCLIP SHAFT (A) TYPE	1	40x2.5 (Heavy)
11	FOOT MOUNTED CASING	1	40 FOOT CASING
11A	FLANGE MOUNTED CASING	1	40 FLANGE CASING
12	DEEP GROOVE BALL BRG	1	6305
13	OUTPUT PINION	1	40 O/P PINION
14	SQ. END KEY	1	KEY
15	DEEP GROOVE BALL BRG	1	6305
16	INTERMEDIATE SPACER (PINION BUSH)	1	40 INT. SPACER
17	INTERMEDIATE GEAR	1	40 INT. GEAR
18	CIRCLIP SHAFT (A) TYPE	1	25x2 (Heavy)
19	OIL PLUG	4	M16x1.5
20	CYLINDRICAL PIN	4	10x20
21	INTERMEDIATE PLATE	1	40 INT. PLATE
22	HEX.SOC. HEAD SCREW	5	SCREW
23	CIRCLIP BORE (B) TYPE	1	52x2 (S)
24	DEEP GROOVE BALL BRG	1	6304
25	INTERMEDIATE PINION	1	40 INT. PINION
26	INPUT GEAR	1	40 I/P GEAR
27	DEEP GROOVE BALL BRG	1	6303-2RS
28	SQ. END KEY	1	KEY
29	INTERMEDIATE GASKET	1	40 INT. GASKET
30	3 STAGE INPUT HOUSING	1	40 - 3 ST I/P HOUSING
31	EYE BOLT	1	M10x20
32	INPUT PINION	1	40 I/P PINION
33	OIL SEAL	1	30x47x7
34	DEEP GROOVE BALL BRG	1	6206-2Z
35	ISS INPUT SHAFT	1	40 ISS I/P SHAFT
36	DEEP GROOVE BALL BRG	1	6009-2Z
37	CIRCLIP SHAFT (A) TYPE	1	45x1.75 (S)
38	ISS INPUT FLANGE	1	40 ISS I/P FLANGE
39	HEX.SOC. HEAD SCREW	6	SCREW
40	OIL SEAL	1	45x65x8
41	ROUND END KEY	1	KEY
42	HEX.SOC. HEAD SCREW	7	SCREW

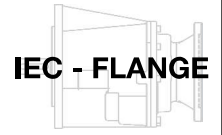
# TH SERIES EXPLODED VIEW

TH50-F/FL-2-IEC

TH60-F/FL-2-IEC



TH50-TH60-FOOT/FLANGE MOUNTING-TWO STAGE-INPUT IEC FLANGE



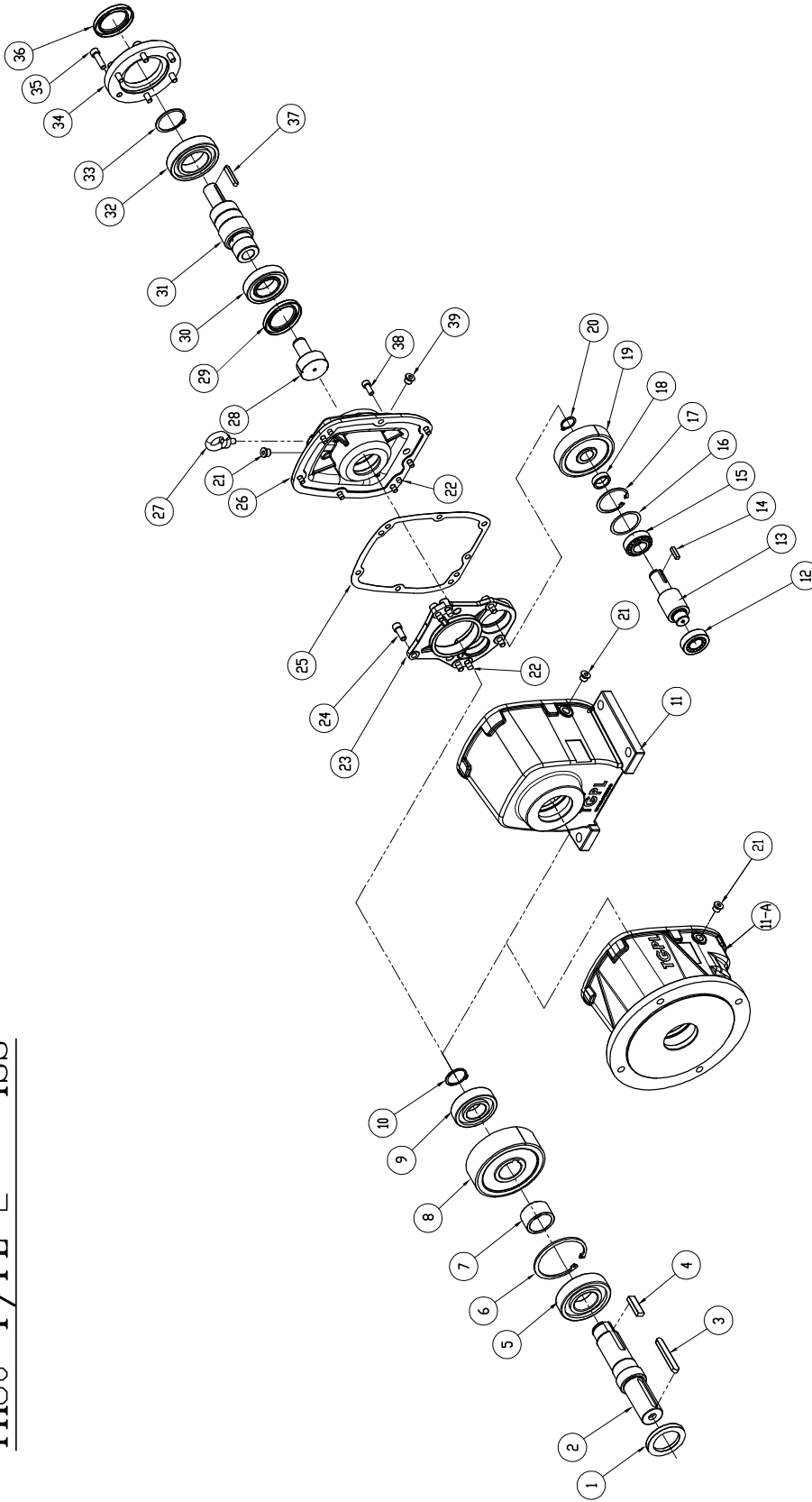
**TH50 & TH60**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 2 STAGE - IEC**

PART NO.	PART DESCRIPTION	QTY	TH50-2 - IEC	TH60-2 - IEC
1	OILSEAL	1	62x90x10	75x100x10
2	OUTPUT SHAFT	1	50 O/P SHAFT	60 O/P SHAFT
3	ROUND END KEY	1	KEY	KEY
4	SQ. END KEY	1	KEY	KEY
5	DEEP GROOVE BALL BRG	1	6311-2RS	6313-2RS
6	CIRCLIP BORE (B) TYPE	1	120x4 (S)	140x4 (S)
7	O/P SPACER (O/P SHAFT BUSH)	1	50 O/P SPACER	60 O/P SPACER
8	OUTPUT GEAR	1	50 O/P GEAR	60 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6309	6311
10	CIRCLIP SHAFT (A) TYPE	1	45x2.5 (Heavy)	55x3 (Heavy)
11	FOOT MOUNTED CASING	1	50 FOOT CASING	60 FOOT CASING
11A	FLANGE MOUNTED CASING	1	50 FLANGE CASING	60 FLANGE CASING
12	TAPER ROLLER BRG	1	32206	33207
13	OUTPUT PINION	1	50 O/P PINION	60 O/P PINION
14	SQ. END KEY	1	KEY	KEY
15	TAPER ROLLER BRG	1	32206	32208
16	INTERMEDIATE SHIM	1	54x62x0.2	68x80x0.2
17	CIRCLIP BORE (B) TYPE	1	62x2 (S)	80x2.5 (S)
18	INT. SPACER (PINION BUSH)	1	50 INT. SPACER	60 INT. SPACER
19	INPUT GEAR	1	50 I/P GEAR	60 I/P GEAR
20	CIRCLIP SHAFT (A) TYPE	1	30x2 (Heavy)	40x2.5 (Heavy)
21	OIL PLUG	4	M16x1.5	M20x1.5
22	CYLINDRICAL PIN	4	10x20	12x25
23	INTERMEDIATE PLATE	1	50 INT. PLATE	60 INT. PLATE
24	HEX.SOC. HEAD SCREW	5	SCREW	SCREW
25	INTERMEDIATE GASKET	1	50 INT. GASKET	60 INT. GASKET
26	2STAGE INPUT HOUSING	1	50 - 2 ST I/P HOUSING	60 - 2 ST I/P HOUSING
27	EYE BOLT	1	M12x20	M16x25
28	INPUT PINION	1	50 I/P PINION	60 I/P PINION
29	OIL SEAL	1	50x72x8	60x80x8
30	DEEP GROOVE BALL BRG	1	6210-2Z	6212-2Z
31	CIRCLIP SHAFT (A) TYPE	1	65x2.5 (S)	80x2.5 (S)
32	DEEP GROOVE BALL BRG	1	6213-2Z	6216-2Z
33	IEC INPUT SHAFT	1	50 IEC I/P SHAFT	60 IEC I/P SHAFT
34	HEX.SOC. HEAD SCREW	6	SCREW	SCREW
35	IEC MOTOR FLANGE	1	90(or)100/112(or)132(or)160	100/112(or)132(or)160(or)180
36	COUPLING SPIDER (RUBBER BUSH)	1	50 COUPLING SPIDER	60 COUPLING SPIDER
37	COUPLING	1	50 COUPLING	60 COUPLING
38	CRUB SCREW	1	SCREW	SCREW
39 & 40	NUT & SPRING WASHER	4	NUT	NUT
41	BOLT	4	BOLT	BOLT
42	HEX.SOC. HEAD SCREW	9	SCREW	SCREW

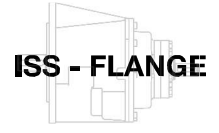
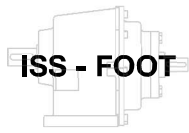
# TH SERIES EXPLODED VIEW

TH50-F/FL-2- - - -ISS  
 TH60-F/FL-2- - - -ISS



TH50-TH60-FOOT/FLANGE MOUNTING-TWO STAGE-INPUT SOLID SHAFT





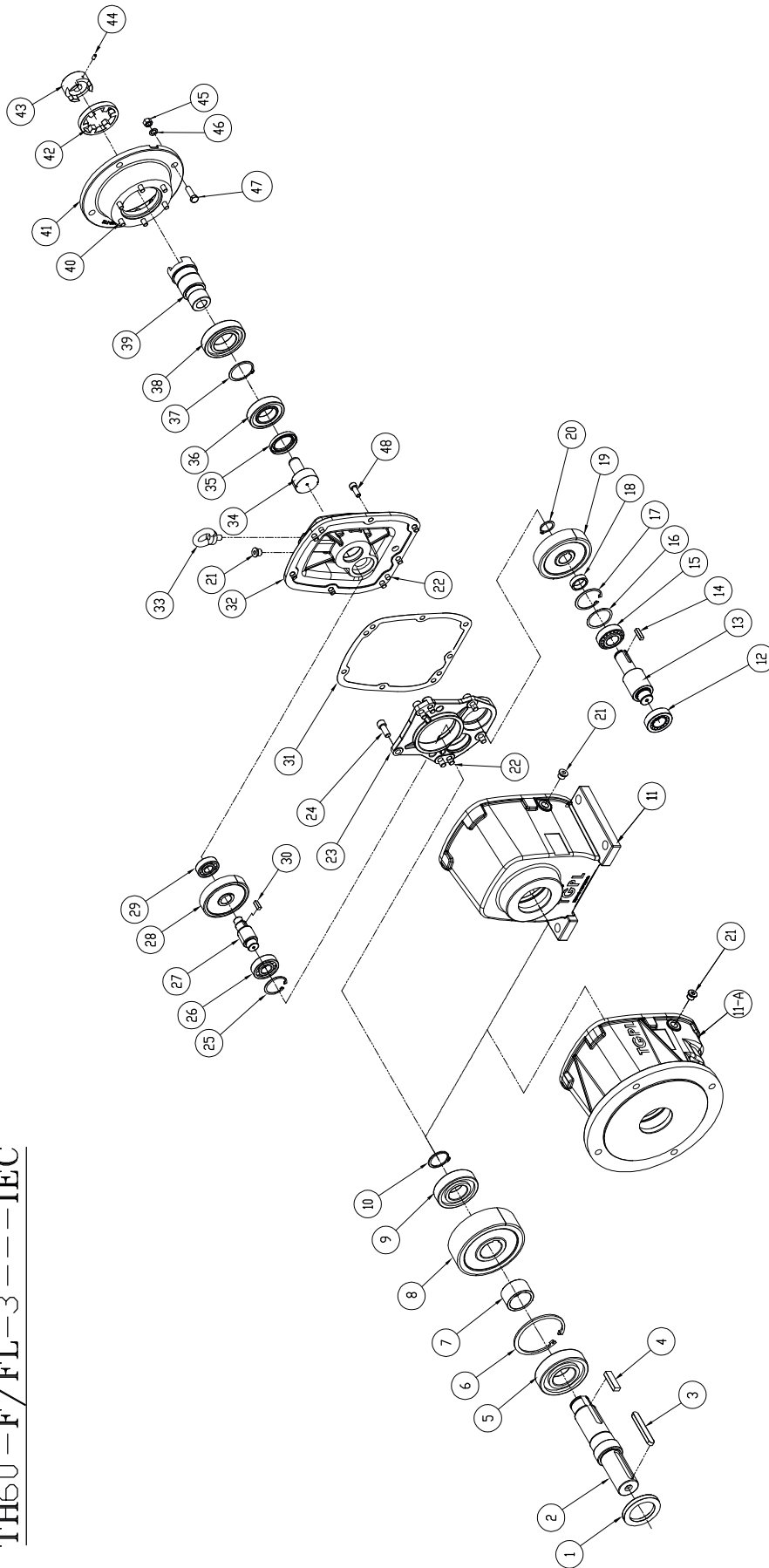
**TH50 & TH60**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 2 STAGE - ISS**

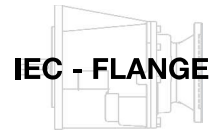
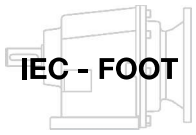
PART NO.	PART DESCRIPTION	QTY	TH50-2 - ISS	TH60-2 - ISS
1	OILSEAL	1	62x90x10	75x100x10
2	OUTPUT SHAFT	1	50 O/P SHAFT	60 O/P SHAFT
3	ROUND END KEY	1	KEY	KEY
4	SQ. END KEY	1	KEY	KEY
5	DEEP GROOVE BALL BRG	1	6311-2RS	6313-2RS
6	CIRCLIP BORE (B) TYPE	1	120x4 (S)	140x4 (S)
7	O/P SPACER (O/P SHAFT BUSH)	1	50 O/P SPACER	60 O/P SPACER
8	OUTPUT GEAR	1	50 O/P GEAR	60 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6309	6311
10	CIRCLIP SHAFT (A) TYPE	1	45x2.5 (Heavy)	55x3 (Heavy)
11	FOOT MOUNTED CASING	1	50 FOOT CASING	60 FOOT CASING
11A	FLANGE MOUNTED CASING	1	50 FLANGE CASING	60 FLANGE CASING
12	TAPER ROLLER BRG	1	32206	33207
13	OUTPUT PINION	1	50 O/P PINION	60 O/P PINION
14	SQ. END KEY	1	KEY	KEY
15	TAPER ROLLER BRG	1	32206	32208
16	INTERMEDIATE SHIM	1	54x62x0.2	68x80x0.2
17	CIRCLIP BORE (B) TYPE	1	62x2 (S)	80x2.5 (S)
18	INT. SPACER (PINION BUSH)	1	50 INT. SPACER	60 INT. SPACER
19	INPUT GEAR	1	50 I/P GEAR	60 I/P GEAR
20	CIRCLIP SHAFT (A) TYPE	1	30x2 (Heavy)	40x2.5 (Heavy)
21	OIL PLUG	4	M16x1.5	M20x1.5
22	CYLINDRICAL PIN	4	10x20	12x25
23	INTERMEDIATE PLATE	1	50 INT. PLATE	60 INT. PLATE
24	HEX.SOC. HEAD SCREW	5	SCREW	SCREW
25	INTERMEDIATE GASKET	1	50 INT. GASKET	60 INT. GASKET
26	2 STAGE INPUT HOUSING	1	50 - 2 ST I/P HOUSING	60 - 2 ST I/P HOUSING
27	EYE BOLT	1	M12x20	M16x25
28	INPUT PINION	1	50 I/P PINION	60 I/P PINION
29	OIL SEAL ( Only For V5 & V1 Mounting Positions)	1	50x72x8	60x80x8
30	CYLINDRICAL ROLLER BRG	1	NJ210	NJ212
31	ISS INPUT SHAFT	1	50 ISS I/P SHAFT	60 ISS I/P SHAFT
32	DEEP GROOVE BALL BRG	1	6213	6216
33	CIRCLIP SHAFT (A) TYPE	1	65x2.5 (S)	80x2.5 (S)
34	ISS INPUT FLANGE	1	50 ISS I/P FLANGE	60 ISS I/P FLANGE
35	HEX. HEAD SCREW	6	SCREW	SCREW
36	OILSEAL	1	65x100x10	80x110x10
37	ROUND END KEY	1	KEY	KEY
38	HEX.SOC. HEAD SCREW	9	SCREW	SCREW
39	PLUG ( Only For V5 & V1 Mounting Positions)	1	M10x1	M10x1

# TH SERIES EXPLODED VIEW

TH50 - F / FL - 3 - - - IEC  
 TH60 - F / FL - 3 - - - IEC



TH50 - TH60 - FOOT / FLANGE MOUNTING - THREE STAGE - INPUT IEC FLANGE



**TH50 & TH60**

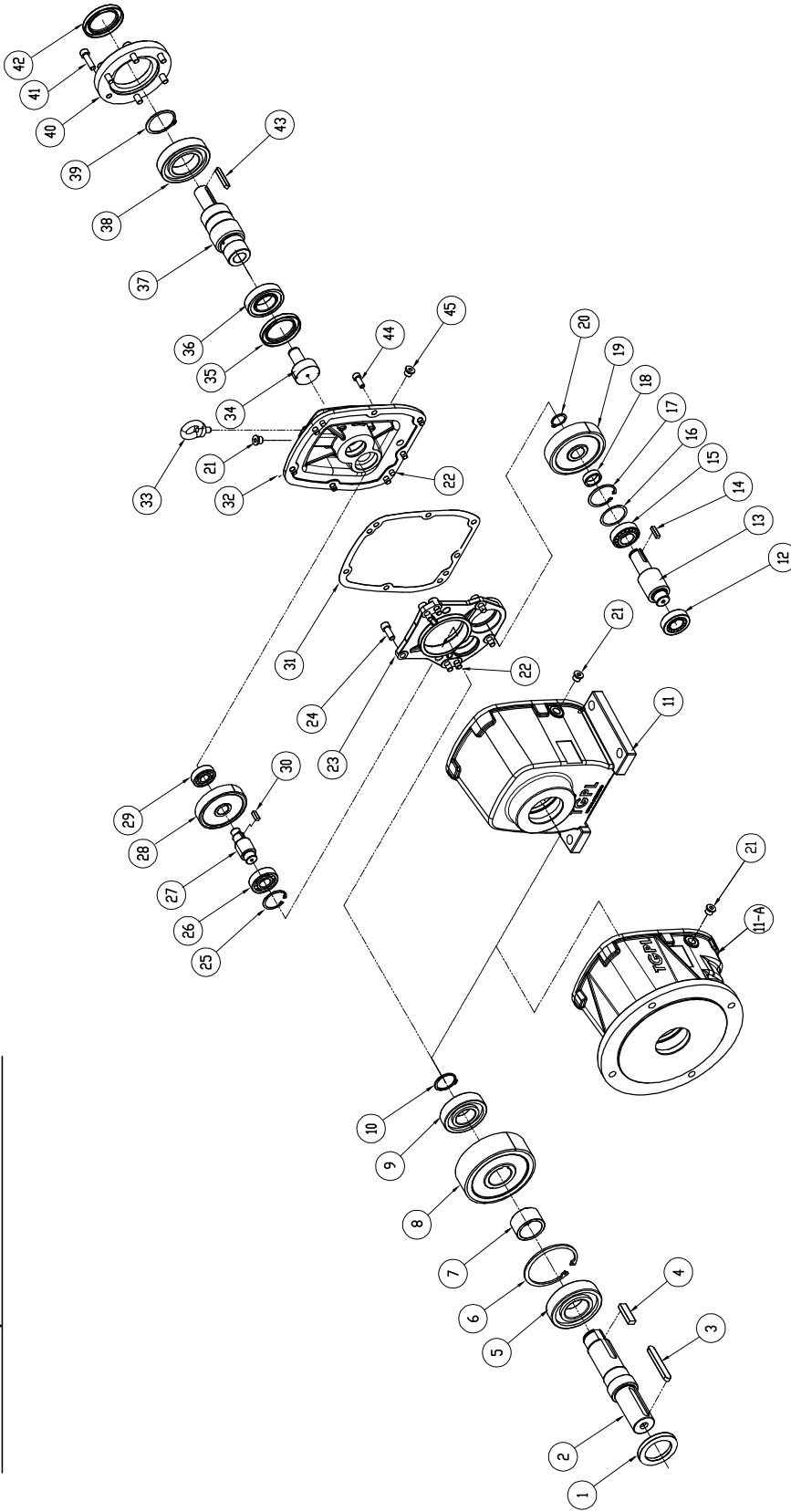
**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 3 STAGE - IEC**

PART NO.	PART DESCRIPTION	QTY	TH50-3 - IEC	TH60-3 - IEC
1	OILSEAL	1	62x90x10	75x100x10
2	OUTPUT SHAFT	1	50 O/P SHAFT	60 O/P SHAFT
3	ROUND END KEY	1	KEY	KEY
4	SQ. END KEY	1	KEY	KEY
5	DEEP GROOVE BALL BRG	1	6311-2RS	6313-2RS
6	CIRCLIP BORE (B) TYPE	1	120x4 (S)	140x4 (S)
7	O/P SPACER (O/P SHAFT BUSH)	1	50 O/P SPACER	60 O/P SPACER
8	OUTPUT GEAR	1	50 O/P GEAR	60 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6309	6311
10	CIRCLIP SHAFT (A) TYPE	1	45x2.5 (Heavy)	55x3 (Heavy)
11	FOOT MOUNTED CASING	1	50 FOOT CASING	60 FOOT CASING
11A	FLANGE MOUNTED CASING	1	50 FLANGE CASING	60 FLANGE CASING
12	TAPER ROLLER BRG	1	32206	33207
13	OUTPUT PINION	1	50 O/P PINION	60 O/P PINION
14	SQ. END KEY	1	KEY	KEY
15	TAPER ROLLER BRG	1	32206	32208
16	INTERMEDIATE SHIM	1	54x62x0.2	68x80x0.2
17	CIRCLIP BORE (B) TYPE	1	62x2 (S)	80x2.5 (S)
18	INTERMEDIATE SPACER (PINION BUSH)	1	50 INT. SPACER	60 INT. SPACER
19	INTERMEDIATE GEAR	1	50 INT. GEAR	60 INT. GEAR
20	CIRCLIP SHAFT (A) TYPE	1	30x2 (Heavy)	40x2.5 (Heavy)
21	OIL PLUG	4	M16x1.5	M20x1.5
22	CYLINDRICAL PIN	4	10x20	12x25
23	INTERMEDIATE PLATE	1	50 INT. PLATE	60 INT. PLATE
24	HEX.SOC. HEAD SCREW	5	SCREW	SCREW
25	CIRCLIP BORE (B) TYPE	1	62x2 (S)	72x2.5 (S)
26	DEEP GROOVE BALL BRG	1	6305	6306
27	INTERMEDIATE PINION	1	50 INT. PINION	60 INT. PINION
28	INPUT GEAR	1	50 I/P GEAR	60 I/P GEAR
29	DEEP GROOVE BALL BRG	1	6304-2RS	6305-2RS
30	SQ. END KEY	1	KEY	KEY
31	INTERMEDIATE GASKET	1	50 INT. GASKET	60 INT. GASKET
32	3 STAGE INPUT HOUSING	1	50 - 3 ST HOUSING	60 - 3 ST HOUSING
33	EYE BOLT	1	M12x20	M16x25
34	INPUT PINION	1	50 I/P PINION	60 I/P PINION
35	OIL SEAL	1	45x65x8	50x68x8
36	DEEP GROOVE BALL BRG	1	6209-2Z	6210-2Z
37	CIRCLIP SHAFT (A) TYPE	1	55x2 (S)	65x2.5 (S)
38	DEEP GROOVE BALL BRG	1	6211-2Z	6213-2Z
39	IEC INPUT SHAFT	1	50 IEC I/P SHAFT	60 IEC I/P SHAFT
40	HEX.SOC.HEAD SCREW	6	SCREW	SCREW
41	IEC MOTOR FLANGE	1	80/90(or)100/112(or)132	90(or)100/112(or)132(or)160
42	COUPLING SPIDER ( RUBBER BUSH)	1	50 COUPLING SPIDER	60 COUPLING SPIDER
43	COUPLING	1	50 COUPLING	60 COUPLING
44	CRUB SCREW	1	SCREW	SCREW
45 & 46	NUT & SPRING WASHER	4	NUT	NUT
47	BOLT	4	BOLT	BOLT
48	HEX.SOC. HEAD SCREW	9	SCREW	SCREW

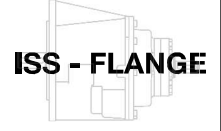
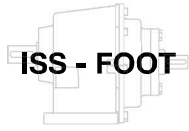
# TH SERIES EXPLODED VIEW

TH50-F/FL-3---ISS

TH60-F/FL-3---ISS



TH50-TH60-FOOT/FLANGE MOUNTING-THREE STAGE-INPUT SOLID SHAFT



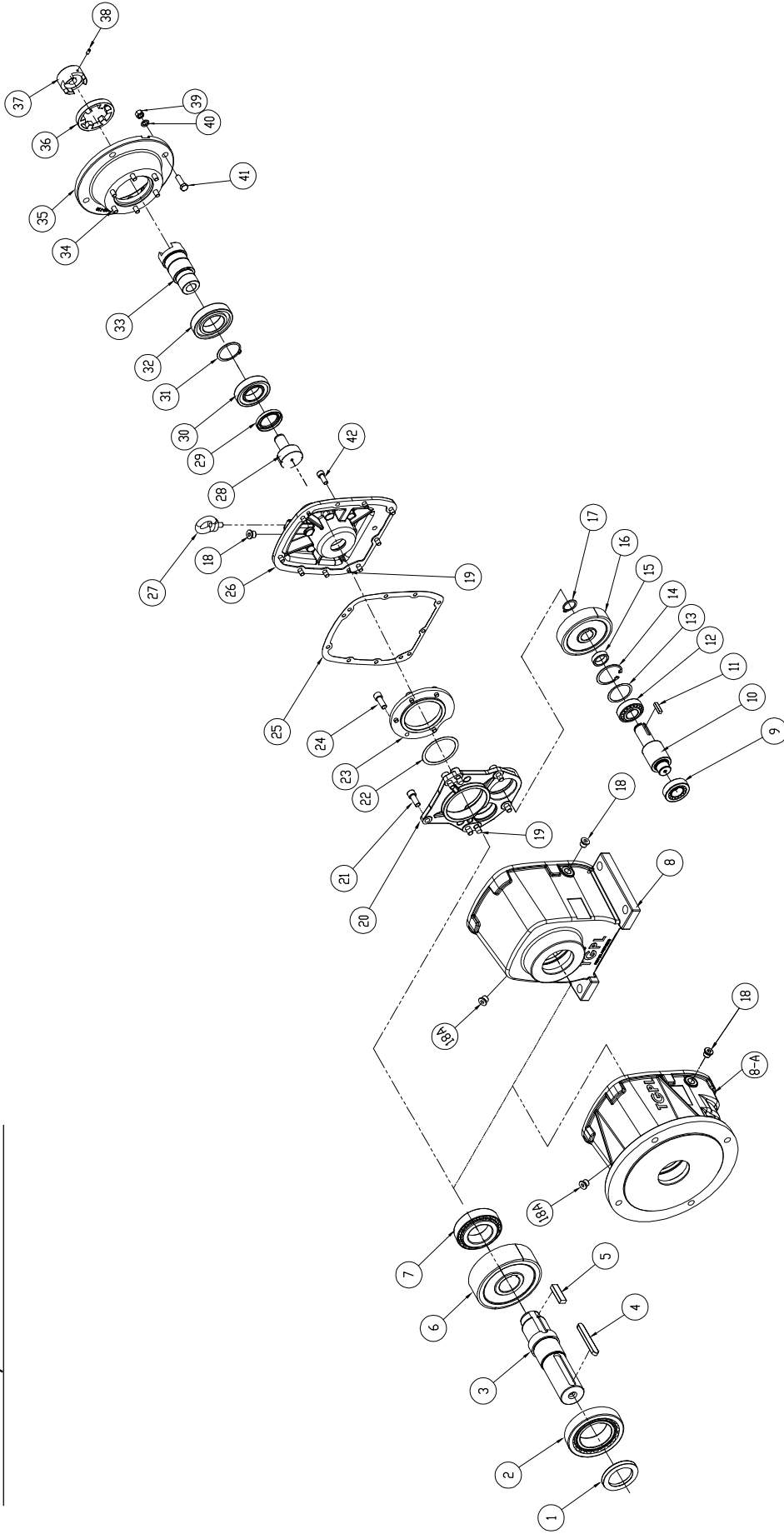
**TH50 & TH60**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 3 STAGE - ISS**

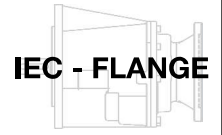
PART NO.	PART DESCRIPTION	QTY	TH50-3 - ISS	TH60-3 - ISS
1	OILSEAL	1	62x90x10	75x100x10
2	OUTPUT SHAFT	1	50 O/P SHAFT	60 O/P SHAFT
3	ROUND END KEY	1	KEY	KEY
4	SQ. END KEY	1	KEY	KEY
5	DEEP GROOVE BALL BRG	1	6311-2RS	6313-2RS
6	CIRCLIP BORE (B) TYPE	1	120x4 (S)	140x4 (S)
7	O/P SPACER (O/P SHAFT BUSH)	1	50 O/P SPACER	60 O/P SPACER
8	OUTPUT GEAR	1	50 O/P GEAR	60 O/P GEAR
9	DEEP GROOVE BALL BRG	1	6309	6311
10	CIRCLIP SHAFT (A) TYPE	1	45x2.5 (Heavy)	55x3 (Heavy)
11	FOOT MOUNTED CASING	1	50 FOOT CASING	60 FOOT CASING
11A	FLANGE MOUNTED CASING	1	50 FLANGE CASING	60 FLANGE CASING
12	TAPER ROLLER BRG	1	32206	33207
13	OUTPUT PINION	1	50 O/P PINION	60 O/P PINION
14	SQ. END KEY	1	KEY	KEY
15	TAPER ROLLER BRG	1	32206	32208
16	INTERMEDIATE SHIM	1	54x62x0.2	68x80x0.2
17	CIRCLIP BORE (B) TYPE	1	62x2 (S)	80x2.5 (S)
18	INT. SPACER (PINION BUSH)	1	50 INT. SPACER	60 INT. SPACER
19	INTERMEDIATE GEAR	1	50 INT. GEAR	60 INT. GEAR
20	CIRCLIP SHAFT (A) TYPE	1	30x2 (Heavy)	40x2.5 (Heavy)
21	OIL PLUG	4	M16x1.5	M20x1.5
22	CYLINDRICAL PIN	4	12x20	12x25
23	INTERMEDIATE PLATE	1	50 INT. PLATE	60 INT. PLATE
24	HEX.SOC. HEAD SCREW	5	SCREW	SCREW
25	CIRCLIP BORE (B) TYPE	1	62x2 (S)	72x2.5 (S)
26	DEEP GROOVE BALL BRG	1	6305	6306
27	INTERMEDIATE PINION	1	50 INT. PINION	60 INT. PINION
28	INPUT GEAR	1	50 I/P GEAR	60 I/P GEAR
29	DEEP GROOVE BALL BRG	1	6304-2RS	6305-2RS
30	SQ. END KEY	1	KEY	KEY
31	INTERMEDIATE GASKET	1	50 INT. GASKET	60 INT. GASKET
32	3 STAGE INPUT HOUSING	1	50 - 3 ST HOUSING	60 - 3 ST HOUSING
33	EYE BOLT	1	M12x20	M16x25
34	INPUT PINION	1	50 I/P PINION	60 I/P PINION
35	OIL SEAL (Only for V5&V1 Mounting Positions)	1	45x65x8	50x68x8
36	CYLINDRICAL ROLLER BRG	1	6209-2Z	NJ210
37	ISS INPUT SHAFT	1	50 ISS I/P SHAFT	60 ISS I/P SHAFT
38	DEEP GROOVE BALL BRG	1	6211	6213
39	CIRCLIP SHAFT (A) TYPE	1	55x2 (S)	65x2.5 (S)
40	ISS INPUT FLANGE	1	50 ISS I/P FLANGE	60 ISS I/P FLANGE
41	HEX.SOC. HEAD SCREW	6	SCREW	SCREW
42	OIL SEAL	1	55x80x8	65x100x10
43	ROUND END KEY	1	KEY	KEY
44	HEX.SOC. HEAD SCREW	9	SCREW	SCREW
45	PLUG (Only for V5&V1 Mounting Positions)	1	NA	M10x1

# TH SERIES EXPLODED VIEW

TH80—F/FL—2—---IEC



TH80—FOOT/FLANGE MOUNTING—TWO STAGE—INPUT IEC FLANGE



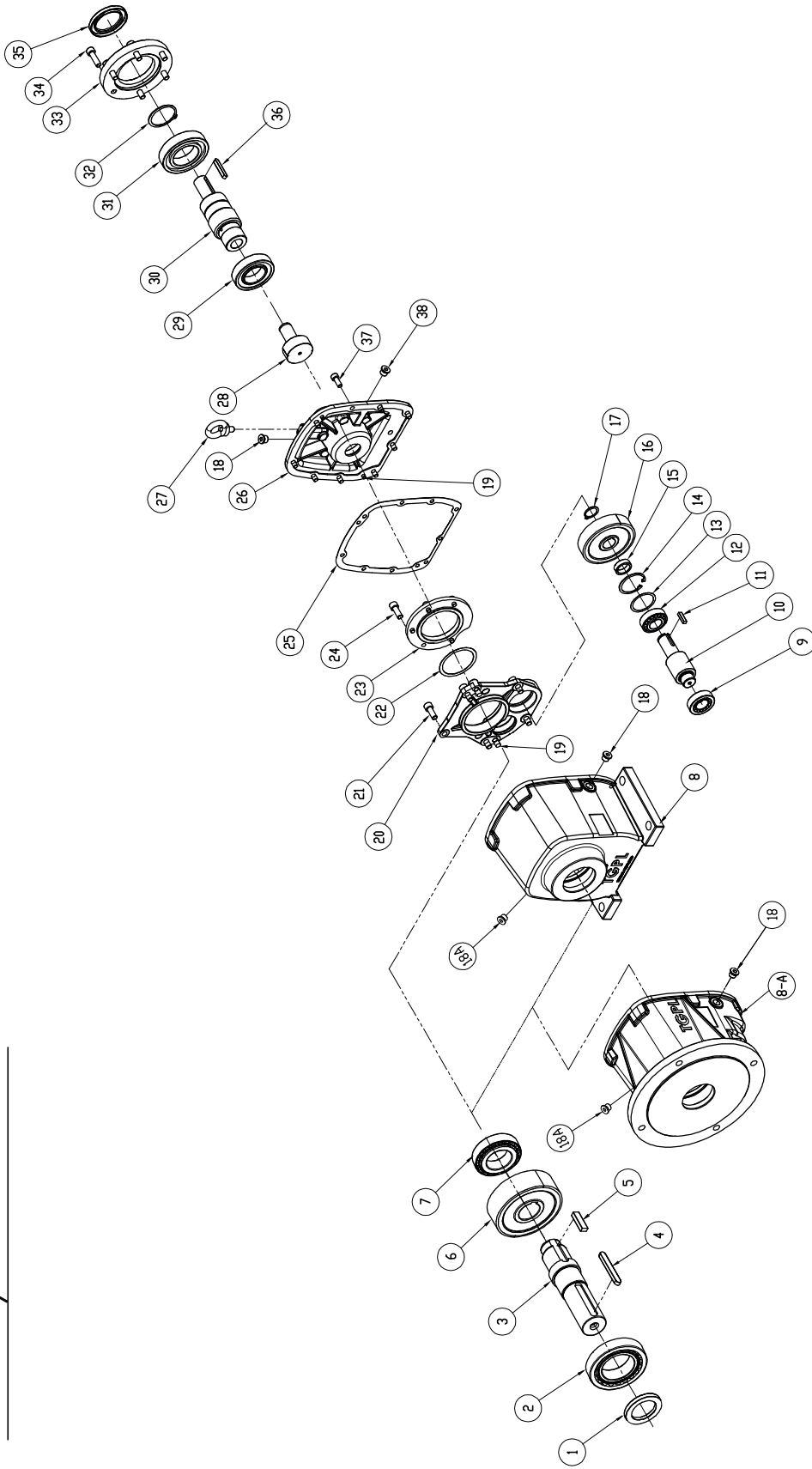
**TH80**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 2 STAGE - IEC**

PART NO.	PART DESCRIPTION	QTY	TH80-2 - IEC
1	OILSEAL	1	85x110x12
2	TAPPER ROLLER BEARING	1	32217
3	OUTPUT SHAFT	1	80 O/P SHAFT
4	ROUND END KEY	1	KEY
5	SQ. END KEY	1	KEY
6	OUTPUT GEAR	1	80 O/P GEAR
7	TAPPER ROLLER BEARING	1	32213
8	FOOT MOUNTED CASING	1	80 FOOT CASING
8A	FLANGE MOUNTED CASING	1	80 FLANGE CASING
9	TAPPER ROLLER BEARING	1	32308
10	OUTPUT PINION	1	80 O/P PINION
11	SQ. END KEY	1	KEY
12	TAPPER ROLLER BEARING	1	32210
13	INTERMEDIATE SHIM	1	90x72x0.2
14	CIRCLIP BORE (B) TYPE	1	90x3 (S)
15	INT. SPACER (PINION BUSH)	1	80 INT. SPACER
16	INPUT GEAR	1	80 I/P GEAR
17	CIRCLIP SHAFT (A) TYPE	1	50x3 (H)
18	OIL PLUG	4	M20x1.5
18A	OIL LEVEL INDICATOR ( ONLY FOR V3 & V6 MOUNTING POSITIONS )	1	M20x1.5
19	CYLINDRICAL PIN	4	12x25
20	INTERMEDIATE PLATE	1	80 INT. PLATE
21	HEX.SOC. HEAD SCREW	5	SCREW
22	SHIM IN INT. PLATE	1	120x100x0.2
23	OUTPUT BEARING CAP	1	80 O/P BEARING CAP
24	HEX.SOC. HEAD SCREW	5	SCREW
25	INTERMEDIATE GASKET	1	80 INT. GASKET
26	2STAGE INPUT HOUSING	1	80 - 2 ST HOUSING
27	EYE BOLT	1	M20x35
28	INPUT PINION	1	80 I/P PINION
29	OIL SEAL	1	60x80x8
30	DEEP GROOVE BALL BRG	1	6312-2Z
31	CIRCLIP SHAFT (A) TYPE	1	90x3 (S)
32	DEEP GROOVE BALL BRG	1	6218-2Z
33	IEC INPUT SHAFT	1	80 IEC I/P SHAFT
34	HEX.SOC. HEAD SCREW	6	SCREW
35	IEC MOTOR FLANGE	1	160(or)180(or)200(or)225
36	COUPLING SPIDER (RUBBER BUSH)	1	80 COUPLING SPIDER
37	COUPLING	1	80 COUPLING
38	CRUB SCREW	1	SCREW
39 & 40	NUT & SPRING WASHER	4	NUT
41	BOLT	4	BOLT
42	HEX.SOC. HEAD SCREW	9	SCREW

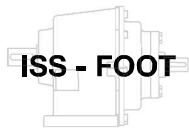
# TH SERIES EXPLODED VIEW

TH80-F/FL-2-SS



TH80-F/FL-2-SS





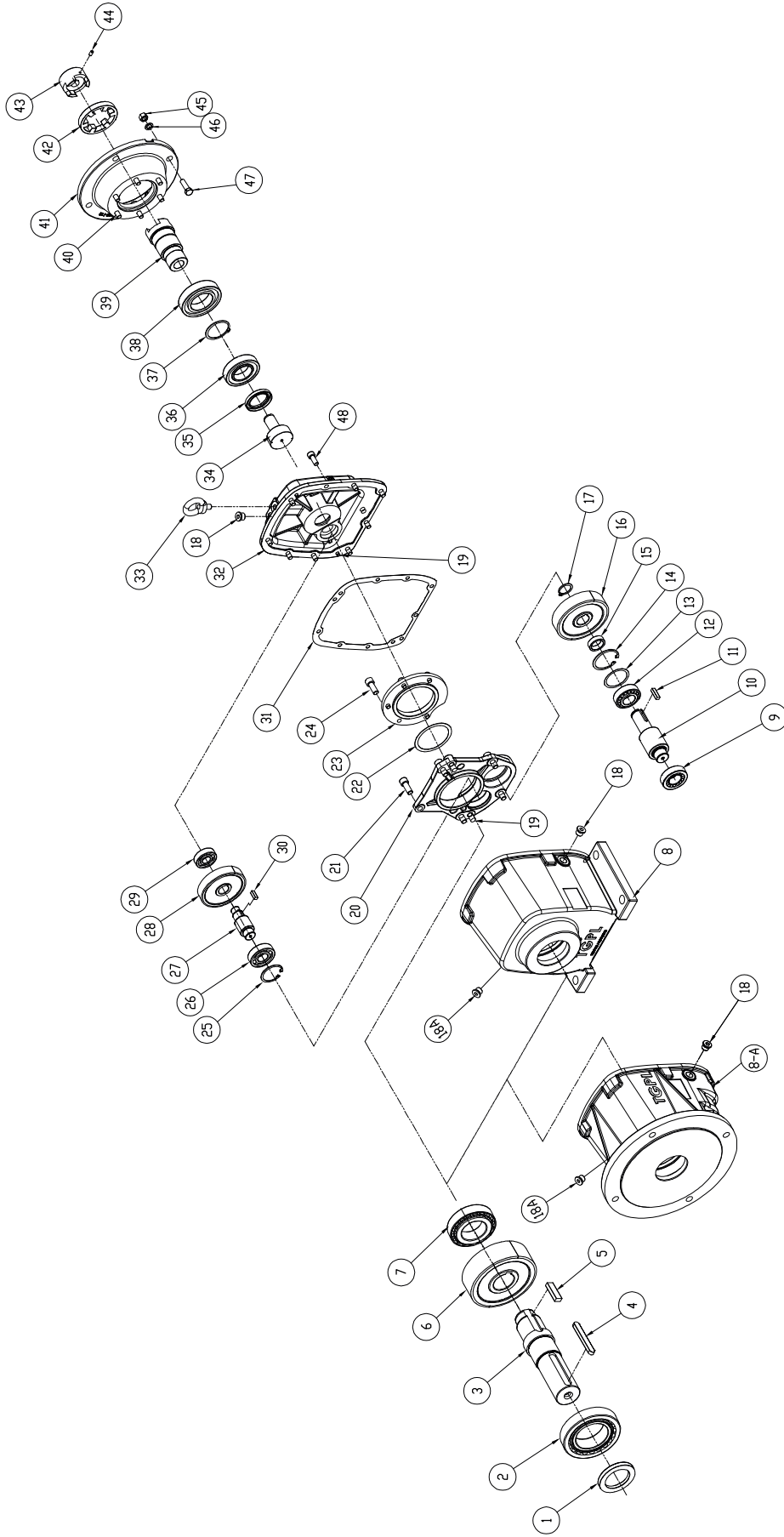
**TH80**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 2 STAGE - ISS**

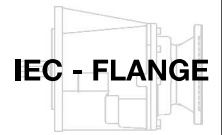
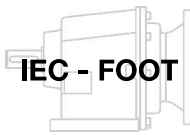
PART NO.	PART DESCRIPTION	QTY	TH80-2 - ISS
1	OILSEAL	1	85x110x12
2	TAPPER ROLLER BEARING	1	32217
3	OUTPUT SHAFT	1	80 O/P SHAFT
4	ROUND END KEY	1	KEY
5	SQ. END KEY	1	KEY
6	OUTPUT GEAR	1	80 O/P GEAR
7	TAPPER ROLLER BEARING	1	32213
8	FOOT MOUNTED CASING	1	80 FOOT CASING
8A	FLANGE MOUNTED CASING	1	80 FLANGE CASING
9	TAPPER ROLLER BEARING	1	32308
10	OUTPUT PINION	1	80 O/P PINION
11	SQ. END KEY	1	KEY
12	TAPPER ROLLER BEARING	1	32210
13	INTERMEDIATE SHIM	1	90x72x0.2
14	CIRCLIP BORE (B) TYPE	1	90x3 (S)
15	INT. SPACER (PINION BUSH)	1	80 INT. SPACER
16	INPUT GEAR	1	80 I/P GEAR
17	CIRCLIP SHAFT (A) TYPE	1	50x3 (H)
18	OIL PLUG	4	M20x1.5
18A	OIL LEVEL INDICATOR ( ONLY FOR V3 & V6 MOUNTING POSITIONS )	1	M20x1.5
19	CYLINDRICAL PIN	4	12x25
20	INTERMEDIATE PLATE	1	80 INT. PLATE
21	HEX.SOC. HEAD SCREW	5	SCREW
22	SHIM IN INT. PLATE	1	120x100x0.2
23	OUTPUT BEARING CAP	1	80 O/P BEARING CAP
24	HEX.SOC. HEAD SCREW	5	SCREW
25	INTERMEDIATE GASKET	1	80 INT. GASKET
26	2STAGE INPUT HOUSING	1	80 - 2 ST HOUSING
27	EYE BOLT	1	M20x35
28	INPUT PINION	1	80 INPUT PINION
29	CYLINDRICAL ROLLER BRG	1	NJ312
30	ISS INPUT SHAFT	1	80 ISS I/P SHAFT
31	DEEP GROOVE BALL BRG	1	6218
32	CIRCLIP SHAFT (A) TYPE	1	90x3 (S)
33	ISS INPUT FLANGE	1	80 ISS I/P FLANGE
34	HEX.SOC. HEAD SCREW	6	SCREW
35	OIL SEAL	1	90x120x12
36	ROUND END KEY	1	KEY
37	HEX.SOC. HEAD SCREW	9	SCREW
38	PLUG	1	M10x1

# TH SERIES EXPLODED VIEW

TH80-F/FL-3-IEC



TH80-F/FL-3-IEC



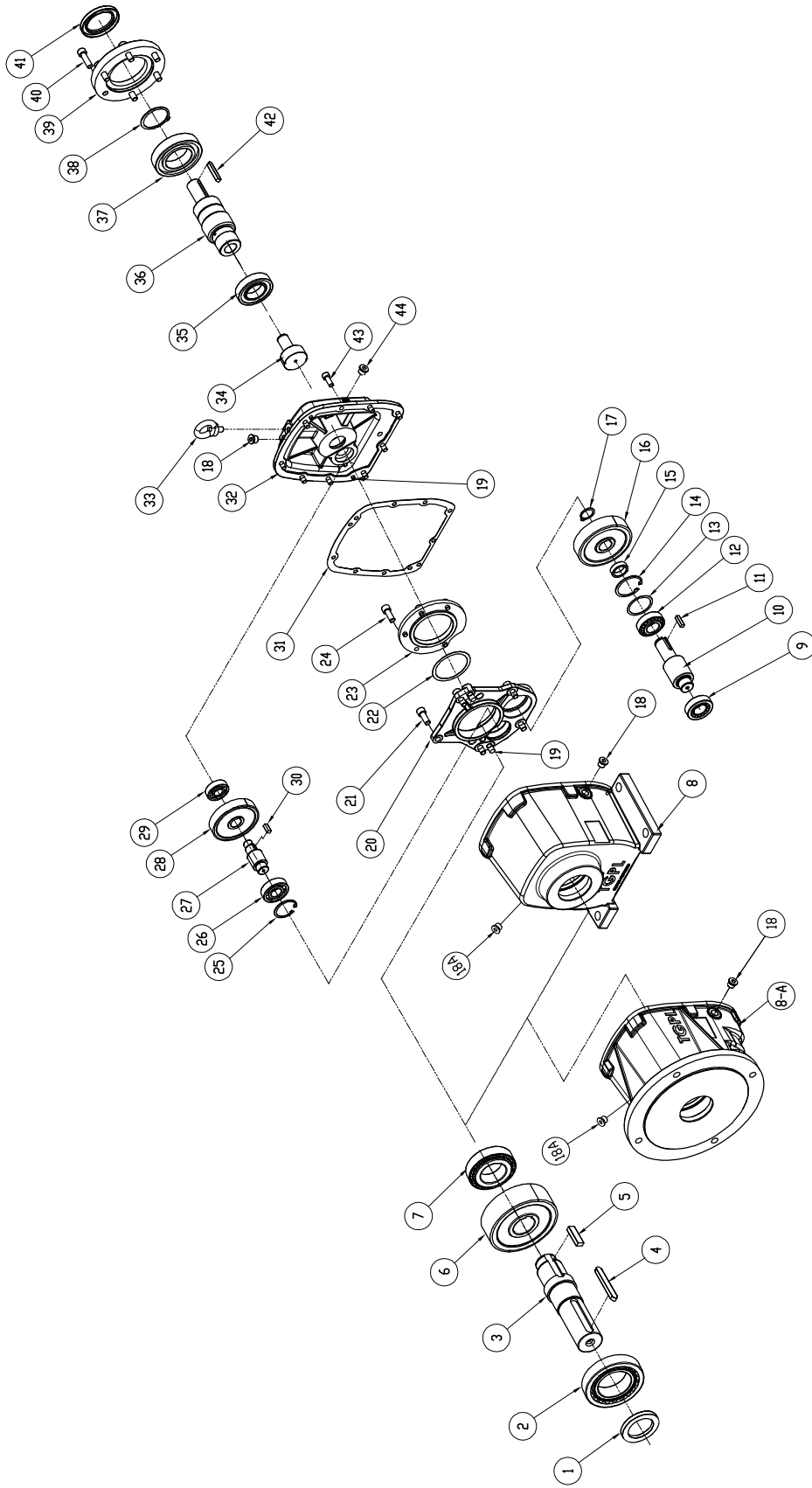
**TH80**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 3 STAGE - IEC**

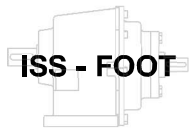
PART NO.	PART DESCRIPTION	QTY	TH80-3 - IEC
1	OILSEAL	1	85x110x12
2	TAPPER ROLLER BEARING	1	32217
3	OUTPUT SHAFT	1	80 O/P SHAFT
4	ROUND END KEY	1	KEY
5	SQ. END KEY	1	KEY
6	OUTPUT GEAR	1	80 O/P GEAR
7	TAPPER ROLLER BEARING	1	32213
8	FOOT MOUNTED CASING	1	80 FOOT CASING
8A	FLANGE MOUNTED CASING	1	80 FLANGE CASING
9	TAPPER ROLLER BEARING	1	32308
10	OUTPUT PINION	1	80 O/P PINION
11	SQ. END KEY	1	KEY
12	TAPPER ROLLER BEARING	1	32210
13	INTERMEDIATE SHIM	1	90x72x0.2
14	CIRCLIP BORE (B) TYPE	1	90x3 (S)
15	INT. SPACER (PINION BUSH)	1	80 INT. SPACER
16	INPUT GEAR	1	80 I/P GEAR
17	CIRCLIP SHAFT (A) TYPE	1	50x3 (H)
18	OIL PLUG	4	M20x1.5
18A	OIL LEVEL INDICATOR ( ONLY FOR V3 & V6 MOUNTING POSITIONS )	1	M20x1.5
19	CYLINDRICAL PIN	4	12x25
20	INTERMEDIATE PLATE	1	80 INT. PLATE
21	HEX.SOC. HEAD SCREW	5	SCREW
22	SHIM IN INT. PLATE	1	120x100x0.2
23	OUTPUT BEARING CAP	1	80 O/P BEARING CAP
24	HEX.SOC. HEAD SCREW	5	SCREW
25	CIRCLIP BORE (B) TYPE	1	90x3 (S)
26	DEEP GROOVE BALL BRG	1	6406
27	INTERMEDIATE PINION	1	80 INT. PINION
28	INPUT GEAR	1	80 INPUT GEAR
29	DEEP GROOVE BALL BRG	1	6306-2RS
30	SQ. END KEY	1	KEY
31	INTERMEDIATE GASKET	1	80 INT. GASKET
32	3STAGE INPUT HOUSING	1	80 - 3 ST HOUSING
33	EYE BOLT	1	M20x35
34	INPUT PINION	1	80 INPUT PINION
35	OIL SEAL	1	60x80x8
36	DEEP GROOVE BALL BRG	1	6212-2Z
37	CIRCLIP SHAFT (A) TYPE	1	80x2.5 (S)
38	DEEP GROOVE BALL BRG	1	6216-2Z
39	IEC INPUT SHAFT	1	80 IEC I/P SHAFT
40	HEX.SOC. HEAD SCREW	6	SCREW
41	IEC MOTOR FLANGE	1	100(or)112(or)132(or)160(or)180
42	COUPLING SPIDER (RUBBER BUSH)	1	80 COUPLING SPIDER
43	COUPLING	1	80 COUPLING
44	CRUB SCREW	1	SCREW
45 & 46	NUT & SPRING WASHER	4	NUT
47	BOLT	4	BOLT
48	HEX.SOC. HEAD SCREW	9	SCREW

# TH SERIES EXPLODED VIEW

TH80--F/FL-3---ISS



TH80--FOOT/FLANGE MOUNTING--THREE STAGE--INPUT SOLID SHAFT



**TH80**

**PARTS LIST FOR F (FOOT) / FL (FLANGE) - 3 STAGE - ISS**

PART NO.	PART DESCRIPTION	QTY	TH80-3 - ISS
1	OILSEAL	1	85x110x12
2	TAPPER ROLLER BEARING	1	32217
3	OUTPUT SHAFT	1	80 O/P SHAFT
4	ROUND END KEY	1	KEY
5	SQ. END KEY	1	KEY
6	OUTPUT GEAR	1	80 O/P GEAR
7	TAPPER ROLLER BEARING	1	32213
8	FOOT MOUNTED CASING	1	80 FOOT CASING
8A	FLANGE MOUNTED CASING	1	80 FLANGE CASING
9	TAPPER ROLLER BEARING	1	32308
10	OUTPUT PINION	1	80 O/P PINION
11	SQ. END KEY	1	KEY
12	TAPPER ROLLER BEARING	1	32210
13	INTERMEDIATE SHIM	1	90x72x0.2
14	CIRCLIP BORE (B) TYPE	1	90x3 (S)
15	INT. SPACER (PINION BUSH)	1	80 INT. SPACER
16	INPUT GEAR	1	80 I/P GEAR
17	CIRCLIP SHAFT (A) TYPE	1	50x3 (H)
18	OIL PLUG	4	M20x1.5
18A	OIL LEVEL INDICATOR ( ONLY FOR V3 & V6 MOUNTING POSITIONS )	1	M20x1.5
19	CYLINDRICAL PIN	4	12x25
20	INTERMEDIATE PLATE	1	80 INT. PLATE
21	HEX.SOC. HEAD SCREW	5	SCREW
22	SHIM IN INT. PLATE	1	120x100x0.2
23	OUTPUT BEARING CAP	1	80 O/P BEARING CAP
24	HEX.SOC. HEAD SCREW	5	SCREW
25	CIRCLIP BORE (B) TYPE	1	90x3 (S)
26	DEEP GROOVE BALL BRG	1	6406
27	INTERMEDIATE PINION	1	80 INT. PINION
28	INPUT GEAR	1	80 INPUT GEAR
29	DEEP GROOVE BALL BRG	1	6306-2RS
30	SQ. END KEY	1	KEY
31	INTERMEDIATE GASKET	1	80 INT. GASKET
32	3STAGE INPUT HOUSING	1	80 - 3 ST HOUSING
33	EYE BOLT	1	M20x35
34	INPUT PINION	1	80 INPUT PINION
35	CYLINDRICAL ROLLER BRG	1	NJ212
36	ISS INPUT SHAFT	1	80 ISS I/P SHAFT
37	DEEP GROOVE BALL BRG	1	6216
38	CIRCLIP SHAFT (A) TYPE	1	80x2.5 (S)
39	ISS INPUT FLANGE	1	80 ISS I/P FLANGE
40	HEX.SOC. HEAD SCREW	6	SCREW
41	OIL SEAL	1	80x110x10
42	ROUND END KEY	1	KEY
43	HEX.SOC. HEAD SCREW	9	SCREW
44	PLUG	1	M10x1